QUALITATIVE ENVIRONMENTAL SITE ASSESSMENT AND DEVELOPMENT FEASIBILITY STUDY REPORT

Flint Group Pigments - Parcels 43 & 45 Huntington, West Virginia

Prepared for:

Huntington Municipal Development Authority

P.O. Box 1659 Huntington, West Virginia 25717

Prepared by:

Potesta & Associates, Inc.

7012 MacCorkle Avenue, SE Charleston, West Virginia 25304 Phone: (304) 342-1400 Fax: (304) 343-9031

Email: potesta@potesta.com

Project No. 0101-18-0317-001

December 14, 2018



TABLE OF CONTENTS

1.0	INTR	ODUCTION	1
	1.1	Proposed Property Development Plan	1
	1.2	Site History and Environmental Permitting Status	2
	1.3	Study Scope of Services	4
2.0	ENVI	RONMENTAL ASSESSMENT	4
2.0	2.1	Soil Boring Spacing and Depths	
	2.2	Methodology for Soil Sample Collection and Laboratory Analysis	
	2.3	Field Sampling Activities	
	2.3	2.3.1 Existing Site Utility Clearance.	
		2.3.2 Advancement and Logging/Screening of Soil Borings	
		2.3.3 Soil Samples Selected for Laboratory Analysis	
	2.4	Sampling Results and Discussions	
		2.4.1 Contaminant Concentration Screening Values	
		2.4.2 Analytical Results and Screening Summary	
		2.4.2.1 Parcel 43 Surface Soil	
		2.4.2.2 Parcel 43 Subsurface Soil	
		2.4.2.3 Parcel 45 Surface Soil	
		2.4.3 Discussion of Analytes Exceeding Screening Concentrations	
		2.4.3.1 Aroclor 1242-Impacted Soil	
3.0	EE A S	SIBILITY SITING STUDY	11
3.0	3.1	Site Soils	
	3.2	Groundwater Occurrence	
	3.3	Existing Site Utilities	
	3.4	Implications of PCB Impacted Soils on Parcel 43	
	3.5	Development Restrictions for RCRA Compliance	
	3.6	Vapor Intrusion Barriers for Indoor Spaces	
	3.7	Limitation of Excavation Depths	
	3.8	NPDES Construction Stormwater Permitting	
	3.9	Municipal Separate Storm Sewer Systems (MS4) Compliance Requirements	
4.0	CON	CLUSIONS	. 17
5.0	CLOS	SING	. 18
APPE	NDIC:	<u>ES</u>	
Figure	es	APPENDIX	ΧA
		rom Master Locators APPENDIX	
Boring	g Logs	APPENDIX	X C
		APPENDIX	
Labora	atory A	nalytical Report	ΧE

QUALITATIVE ENVIRONMENTAL SITE ASSESSMENT & FEASIBILITY SITING STUDY REPORT

Flint Pigments Group – Parcels 43 & 45 Huntington, West Virginia

1.0 INTRODUCTION

Potesta & Associates, Inc. (POTESTA) performed a qualitative environmental site assessment (ESA) and feasibility siting study (FSS) of two tax parcels which are currently owned by Flint Pigments Group (Flint) and identified as Huntington-Gideon Corp District, Tax Map 5, Parcels 43 and 45 (Site), on behalf of the Huntington Municipal Development Authority (HMDA). The ESA/FSS was performed in general accordance with the proposed scope of services outlined in POTESTA's proposals dated October 8, 2018, and November 19, 2018 (the latter proposal included the addition of submittal of selected samples for laboratory analysis).

1.1 Proposed Property Development Plan

POTESTA understands that an option is being considered by HMDA with Flint to purchase the Site, which encompasses approximately 7.8 acres. HMDA plans to make the Site available to Marshall University (Marshall) for the development of a new baseball stadium along with an associated surface parking lot to provide parking for their Division I men's baseball program. The location of the Site parcels is presented in the attached Figure 1 in Appendix A of this report. According to information provided by Marshall, the new stadium will be constructed on Parcel 43. The existing parking lot, which is situated on Parcel 45 immediately adjacent to the site along the eastern side of 24th Street, will be resurfaced to support the planned facility. The initial schematic concept plan for the baseball stadium which is presented in Figure 2, proposes a 70,000-square-foot athletic facility including a new baseball playing field with fixed, premium spectator seating for approximately 3,500 patrons, a stadium club, restrooms, concessions, retail sales, team and umpire locker rooms, dugouts, support areas, and a baseball administrative suite. The initial facility schematics indicate that the playing surface elevation may be excavated below the current site grades allowing patrons to enter the facility at a concourse level with seating below. This alternative will require the excavation and removal of onsite soil materials to assumed depths ranging from 10 to 15 feet below grade.

The schematic plans for the proposed facility were included in a Request for Qualifications for design/build services which was issued by Marshall in September 2018. The responses were evaluated by Marshall and it is POTESTA's understanding that a design/build contractor has been retained for the project. This study was requested by HMDA to serve as a reference to the design/build team during the preparation and development of the construction plans for the project.

1.2 Site History and Environmental Permitting Status

The Site (Parcels 43 and 45) addressed in this report are situated north of 5th Avenue and are currently owned and operated by Flint (**Figure 1**). These properties were used as support areas for the main manufacturing facilities situated south of 5th Avenue and were utilized as a warehousing and storage area (Parcel 43) and a surface paved parking lot (Parcel 45). Manufacturing operations for various blue pigment dyes began at this site in 1912, following the construction of the initial manufacturing buildings in 1909 by Standard Ultramarine Company. Following several acquisitions and changes in ownership through the late 1970s, the facility was purchased by the Pigments and Dyestuffs Division of BASF Wyandotte Corporation in 1979. In 1986, the Wyandotte Corporation was renamed BASF Corporation and the Huntington facility operated as the Huntington Works of BASF Corporation (BASF). Following the merger of BASF Printing Systems and ANI Printing Inks after respective acquisitions of both companies by CVC Capital Partners in 2004, the ownership and operation of the manufacturing facility was changed to Flint Group Pigments.

The Flint properties, including Parcels 43 and 45, were entered into a United States Environmental Protection Agency (USEPA) facility-lead corrective action program in 1999 by BASF Corporation in response to the USEPA identification of the site as one of USEPA Region III's "high priority" RCRA Corrective Action sites. In July 1999, the WVDEP evaluated the site using USEPA's Environmental Indicator (EI) protocols to assess the site for potential human exposure from any site contaminates and to determine if the site groundwater was contaminated and if so, whether the plume was stable. The results of this evaluation determined that additional studies would be required to collect information regarding the possible effects manufacturing operations had on soil and groundwater resulting from the site's historic manufacturing operations.

In 2000, BASF prepared the Initial Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) Workplan and an addendum to this plan was prepared and submitted to USEPA in 2003. This workplan and addendum included the initial phases of the facility site investigation with the purpose of collecting sufficient site soil and groundwater samples for analytical testing to determine if the USEPA EI protocols were being met at the site as well as the potential need for additional investigations or corrective action measures to be implemented at the site. The results obtained from this initial RFI workplan study resulted in the delineation of eight areas of concern (AOC) throughout the Flint manufacturing property. Two of the AOCs are relevant to this study and are located within the boundaries of Parcels 43 and 45 and are shown on **Figure 2**. These AOCs are referenced and described as follows:

<u>AOC 4 (Fmr. Gasoline Station)</u> - Situated along the southwest corner of Parcel 45, area is currently developed as a greenspace/park area.

<u>AOC 8 (Fmr. Coal Storage Area)</u> - Situated near the southwestern corner of Parcel 43, south and adjacent to the current warehouse 9B structure, area is currently gravel covered.

No further action was recommended for site soils at both AOCs 4 and 8 based on the analytical results of soil samples collected during the initial RFI. These results were noted to support the

conclusion that the detected contaminant concentrations were found to be within acceptable riskbased levels for the current usage for the facility. These results were issued in a written report to USEPA dated August 13, 2003, along with an additional September 20, 2005 letter addendum providing additional results from supplemental groundwater sampling conducted at the site. Impacted groundwater quality was discovered within the boundaries of Parcels 43 and 45, which are situated immediately downgradient from the main manufacturing facility. Several potential source areas (additional AOCs) have been delineated within the manufacturing facility south of 5th Avenue. The initial RFI work concluded that current human exposures to contaminants within groundwater were acceptable based on the investigation results. This conclusion was justified due to declining or stable trends discovered in chlorinated VOC concentrations, declining trends of BTEX concentrations obtained from upgradient monitoring well samples (well TMW-4S), and the calculation of very low groundwater transport velocities for semi volatile organic compounds (SVOCs) rendering the noted groundwater contamination immobile. The initial RFI document also concluded that since there were no current or prospective users of groundwater in this area of Huntington, West Virginia, a critical potential exposure pathway to receptors could be eliminated. Vapor intrusion of volatile organic groundwater contamination was also modeled to evaluate the potential exposure concern to indoor air receptors. The initial RFI study concluded that there was not an unacceptable risk to down gradient receptors via potential vapor intrusion to indoor air pathways.

A second phase of the RFI was completed at the site in 2008 with the purpose of collecting additional soil and groundwater samples for analytical testing. This phase of the RFI focused on the remaining AOCs which were located south of 5th Avenue within the manufacturing areas of the site. This additional sampling effort did not provide additional soil data with regard to Parcels 43 and 45. Groundwater samples were collected in July 2009 as part of this study, including down gradient wells situated within and north of Parcels 43 and 45. The findings presented from this second phase RFI work indicate that the collected results were consistent with the earlier RFI study findings (2002 & 2005), further documenting the reducing trends in groundwater contaminant concentrations. Additionally, the RFI report concluded that no additional groundwater monitoring wells would be required at the site; however, semi-annual groundwater sample collection from the existing site monitoring wells should be continued to monitor and assess the groundwater conditions.

An additional RCRA Facility Investigation Data Gap Report was prepared by BASF in 2016. This study included the collection of additional soil and groundwater samples at the site, including additional delineated AOCs on Parcels 43 and 45 for the purpose of evaluating potential vapor intrusion concerns. These additional AOC areas indicated on **Figure 2** included the entire Parcel 43 (encompassing and including the previous AOC 8 area), referred to as AOC 11 - Shipping and Warehousing Area, and the paved portions of Parcel 45 (excluding the previously delineated AOC 4 area situated near the southwestern corner) which was designated as AOC 10 - North Parking Lot. The study focused on the results of a site-wide groundwater investigation, additional soil sample collection in five areas of the site including AOCs 10 and 11, and deep soil gas investigation along the northern and eastern boundaries of AOC 10 (Parcel 45) to access the potential for soil gas vapor intrusion. Laboratory soil sample results for various contaminants of concern (COCs) were compared and evaluated against the June 2014 Voluntary Remediation and

Redevelopment Rule (VRRR) De Minimis Standard for Industrial Soils (Table 60-3B) and the May 2016 USEPA Regulatory Screening Levels (RGLs). Groundwater results were compared to the June 2014 VRRR De Minimis Standards for Groundwater (Table 60-3B). Soil gas data was compared to the residential and commercial screening values listed in USEPA VISL Calculator Version 3.5.1 and indoor air values were obtained from the Exterior SGC-IAC Calculator Version 3.4.

The results obtained from the 2016 Data Gap Report included a no further investigation recommendation with respect to delineated soil contamination noted within AOC 11 (Parcel 43). The basis for this conclusion was the lack of staining or odors were noted during the advancement of four subsurface borings. The report noted problems with the field screening equipment; however, a soil sample obtained from the highest field screening readings was collected and analyzed for Target Compound List (TCL) VOCs and TCL SVOCs. The report indicates that no contaminants were detected exceeding applicable standards.

1.3 Study Scope of Services

The scope of services for this ESA/FSS was prepared based on POTESTA's review of the relevant environmental site information provided by Flint and BASF, as well as several discussion and meetings with representatives of HMDA, the City of Huntington, and Marshall University The planned study approach was designed to collect additional specific environmental information at the Site to better understand the potential for environmental contamination and then to utilize this information to provide recommendations related to the construction of the planned baseball stadium and its use. The following sections present the findings of POTESTA's recently completed soil sampling event as well as professional opinions related to the potential development, construction, and use of the Site. These findings, conclusions, recommendations, and opinions are offered by POTESTA based on recent exploration work, laboratory results, a review of historical environmental studies, and our understanding of the Site's previous use. These recommendations and opinions are based on POTESTA's understanding of the proposed site development alternatives related to POTESTA on the conceptual site plan provided by Marshall (Figure 2). These opinions are also based on POTESTA's review and understanding of the current facility RCRA site status, current permits, and the impacts and limitations that current environmental site conditions may have on the planned development of the site.

2.0 ENVIRONMENTAL ASSESSMENT

The qualitative ESA approach was developed to collect site-specific subsurface information to evaluate the site with respect to the potential presence and physical extent of potential soil contamination in the areas of proposed construction; specifically, areas of site excavation or portions of the site which would be developed to include buildings. The objective of the ESA was to provide an initial overview including extent and depth within the site boundaries of possible soil contamination and was not designed to constitute a quantitative evaluation of risk to site workers, receptors in surrounding areas, or users of the planned development.

2.1 Soil Boring Spacing and Depths

POTESTA's proposed sampling plan design for the Site was prepared using a computer program entitled, *Visual Sample Plan Version 7.11a*, developed by Pacific Northwest Laboratory, Richland, Washington (VSP). POTESTA utilized the VSP software to determine a boring layout (spacing and quantity) resulting in a calculated confidence interval associated with the delineation of a specific size and shape "hot spot."

POTESTA's proposed sampling depths were developed based on an assumed depth of soil disturbance which would likely be required during excavation and construction of the planned baseball stadium. These depths were assumed by POTESTA based on our review and understanding of the schematic plans for the project which was assumed to be potentially as much as 15 feet below the ground surface (bgs). This assumption was made to account for foundation and buried utility excavations, light tower bases, and the potential conceptual plan of lowering the playing surface below the current site grade. During the field exploration and sampling work, if evidence of contamination was observed within specific samples, advancement of an individual soil boring was to continue to deeper depths until evidence of contamination was no longer observed, groundwater was encountered, or an individual boring depth of 25 feet bgs was reached, whichever was encountered first.

POTESTA understands that the preferred development option is to construct the planned baseball stadium on Parcel 43 with home plate situated near the northwest property corner of the parcel with center field oriented in a southeasterly direction (**Figure 2**). The current parking lot which is situated on Parcel 45 will be upgraded to support the new sport facility. Given this information, POTESTA assumed that the amount and depth of disturbance and excavation on Parcel 45 will be limited to buried utilities such as electrical conduit for parking lot lighting and stormwater drainage. POTESTA's soil boring locations and depths are presented on **Figure 1** and **Table 1**, respectively, and are discussed below.

Parcel 43

Based on schematic plans for the planned baseball stadium, the proposed playing field surface will be recessed and lowered below the existing surrounding site grades. This will require excavation and removal of existing site soils to reach an intended playing surface subgrade elevation within the boundary of Parcel 43. POTESTA's initial assumption of the potential excavation depth and disturbance associated with the planned construction activities on this parcel was on the order of as much as 15 feet below the current site grade. However, during an October 26, 2018 telephone conversation with Mr. Matt Ward of Ward Washington Law Firm (a representative of HMDA), Mr. Luis Pizarro, Associate Director of the USEPA Office of Remediation, Land and Chemicals Division, stated that previous environmental site assessment which has been completed under the facility RCRA permit has identified a natural clay layer underlying the site at a varied depth of 8 to 20 feet bgs (See Section 3.1). Mr. Pizarro stated that the USEPA desires, but does not require, that the clay barrier to remain intact to the extent possible. The presence of volatile groundwater contamination within the boundaries of Parcels 43 and 45 has been verified by previously completed RCRA facility studies. The USEPA has recommended that the clay barrier remain

intact and should not be removed or penetrated to the extent possible to remain as a natural impermeable barrier, limiting the potential for the migration of volatilized contaminates from the groundwater to interior spaces. He further stated that if the design and construction of the planned stadium requires site excavations to reach those depths, steps must be taken to either respect that clay, or to incorporate additional engineering measures to design and deal with increased chances of vapor intrusion issues, as needed.

For the open areas of Parcel 43 (those areas not covered by the former warehouse buildings), POTESTA proposed 53 subsurface soil borings advanced to a proposed depth of 4 feet bgs (**Figure 2**). These shallow borings were oriented on a sample grid across the Parcel 43 site at spacings of approximately 50 feet. Results obtained from the VSP computer model indicated that this grid spacing results in a 95 percent probability of encountering a circular "hot spot" with a radius of 30 feet. Additionally, 13 of those soil borings were to be extended to a proposed total depth of 16 feet bgs. These deeper borings resulted from a 100-foot grid spacing corresponding to a 95 percent probability of encountering a circular "hot spot" with a 60-foot radius. It is noted that the proposed soil boring depths were revised to 5 and 15 feet, as opposed to 4 and 16 feet, respectively, based on the direct-push drilling contractor's sampling equipment configuration. Based on the expected excavation depth limitations (as per Mr. Pizarro's statements), POTESTA does not believe the reduction from 16 feet to 15 feet bgs to be significant.

For the areas of Parcel 43 covered with buildings, POTESTA proposed advancement of up to five soil borings through the floor slabs of each of the existing buildings, each to a proposed depth of 16 feet bgs or deeper as noted.

Parcel 45

The information provided to POTESTA in the schematic development plans of the baseball field development, Parcel 45 is expected to continue to be utilized for surface parking. Given this fact, disturbances on this parcel will be limited to near-surface preparation and paving and likely shallow utility trenching for electrical conduits and stormwater structures and associated conveyance piping. With the required excavation areas yet to be determined, a similar parcel wide approach to that utilized on Parcel 43 for the environmental sampling was followed on this parcel.

POTESTA proposed to advance a total of 19 individual soil borings on Parcel 45 to proposed depths of 4 feet bgs (later revised to 5 feet bgs). This boring layout which is indicated on **Figure 2** corresponds to a grid spacing of approximately 75 feet. This approach is based on VSP model results resulting in a 95 percent probability of encountering a circular "hot spot" with a radius of 45 feet. Associated deeper borings were not proposed on this parcel given the conceptual plan of continuing to utilize this portion of the site as a surface parking lot which limits the planned depth of the required excavation.

2.2 Methodology for Soil Sample Collection and Laboratory Analysis

POTESTA's initial scope of services for the ESA did not include submittal of collected soil samples for laboratory analysis. The intent of initial ESA approach was to rely on field screening

using a portable Photoionization Detector (PID) to screen for the presence of volatile organic compounds (VOCs) as evidence of potential problematic soil contamination, for the following reasons:

- VOCs have been identified as the primary contaminants of concern at the site (including the Flint property manufacturing plant property (south of 5th Avenue) and an associated groundwater contaminant plume which has been determined to extend beneath the site).
- The study site is located immediately down gradient of several RCRA AOCs situated within the main manufacturing facility south of 5th Avenue which have been determined to be historic sources of contamination.
- Elevated levels of VOCs are detectable by field screening using a portable PID, a cost-effective screening method.
- VOCs are the contaminants most likely to cause issues due to odors or volatilization during construction activities and vapor intrusion potential to indoor spaces associated with the future use of developed property.

The initial consensus among POTESTA and HMDA was that the findings of the ESA would be used to evaluate whether further assessment/laboratory analysis would be required or warranted. However, based on the shortened timeline (with respect to the planned purchase date) due to the negotiation of an access agreement with Flint, POTESTA recommended laboratory analysis of a limited number of soil samples obtained during the field work for VOCs, SVOCs, poly chlorinated biphenyls (PCBs), and RCRA metals.

2.3 Field Sampling Activities

In preparation for the field sampling, the predetermined sampling grids for the Site were established in the field by ground survey for reference during the drilling work. Field sampling activities were completed at the site between November 13 thru 16, 2018, following negotiations of a site access agreement between BASF/Flint and POTESTA. The following sections serve to provide a summary of these field sampling activities.

2.3.1 Existing Site Utility Clearance

POTESTA contacted West Virginia 811 and retained Master Locators, a private subsurface utility location contractor, to visit the site and identify the location of buried utilities in the immediate areas of the proposed borings prior to commencing with the site assessment activities. Additionally, POTESTA and Master Locators met on site with representatives of area utility providers to determine and document the locations of know public utilities immediately adjacent to the site boundaries. A sketch of identified on-site utilities and a Field Service Report prepared by Master Locators is included as **Appendix B**.

Additionally, POTESTA reviewed information in a Phase I ESA performed by Ramboll Environ in August 2018 that identified a previous underground rail tunnel crossing 5th Avenue that was reportedly closed and filled in the late 1970s. POTESTA discussed this with on-site Flint personnel, who verified that the tunnel did exist. POTESTA noted subsidence in the sidewalks on both sides of 5th Avenue on the southwest corner of Parcel 43 that may indicate the location of the former rail tunnel.

2.3.2 Advancement and Logging/Screening of Soil Borings

The soil boring labeling nomenclature adopted by POTESTA for the sample collection activities included the parcel identification (i.e. P43 or P45) followed by the east/west grid line starting along the western boundary of each parcel denoted by letters (*i.e.*, A, B, C. etc.) and then the corresponding north/south grid line with a numerical label (*i.e.*, 1, 2, 3, etc.). Additional borings which were advanced within the existing structures on Parcel 43 were labeled with a building number (B1 or B9 – see note in **Section 2.3.3** regarding mislabeling of buildings in the field) and sequential sample number. Collection of the subsurface soil samples at each of the planned boring location grid intersects was accomplished using a direct-push sampling rig. The rig utilized Macro-Core samplers equipped with acetate liners to collect and recover sampled soil horizons from the subsurface, providing a continuous soil core for visual observation, PID screening, log preparation, and sample collection upon retrieval. Direct-push drilling services for this project were provided by A-Zone Environmental Services LLC (A-Zone). Sampling of the individual soil borings was conducted in intervals ranging from approximately 1 to 3 feet based on soil recovery and visual observations.

Soil samples collected during the sampling activities were visually classified and logged by a POTESTA staff scientist/geologist following the Unified Soil Classification System. Following visual observation, the POTESTA field representative placed a portion of the recovered sample into a re-sealable bag in order to field screen the specimen for the presence of organic vapors using a PID. Following sealing of the bag, the portion was then vigorously shaken to aid with the release of organic vapors and allowed to stabilize, and then slightly opened allowing the PID probe tip to be inserted for screening. POTESTA's field representative selected soil samples for laboratory analysis based on field screening results and visual field observations (*i.e.*, appearance, color, and/or noticeable odor). Field observations and screening readings are recorded on POTESTA Soil Boring Log Record forms, included in **Appendix C**, as well as the summary of the soil boring table included as **Table 1** in **Appendix D**.

Those portions of the soil samples which were selected for laboratory analysis were collected into the appropriate laboratory-supplied containers, labeled, and placed in a cooler. These samples were then shipped to Pace Analytical Laboratory, a West Virginia-certified laboratory, with proper chain-of-custody documentation.

2.3.3 Soil Samples Selected for Laboratory Analysis

For the purposes of this ESA, samples from less than 3 feet bgs are considered surface soil samples, and samples from greater than 3 feet bgs are considered subsurface soil samples. POTESTA submitted nine soil samples for laboratory analysis, including:

- Parcel 43 Surface Soil Samples
 - Parcel 43 grid line intersection A2, 0 to 3' bgs sample interval designated as P43 A2 (0-3) Slight odor from 0.2' 2.5', PID = 2.1 ppm
 - o P43 B6 (0-2) Green color in layer from 0.3' 0.5', PID = 0 ppm
 - o P43 E3 (0-2.5) Slight sewage odor from 0' 1.5', PID = 16.2 ppm
 - o P43 F2 (0-2.4) Slight sewage odor from 0' 1.8', PID = 4.7 ppm
 - *B9 B2 (0-2.5) Boring was advanced within Building 1 near the center of the slab
- Parcel 43 Subsurface Soil Samples
 - o P43 D7 (5-7.5) White/pale yellow color from 1.3' 10', sewage odor, PID = 0 ppm
 - *B1 B1 (2.5-4.2) Boring was advanced within Building 9B near the SE corner
- Parcel 45 Surface Soil Samples Only
 - o P45 B1 (0-2.5) Slight odor from 0.2' 2.3', PID = 1.8 ppm
 - \circ P45 B5 (0-2.5) PID = 3.6 ppm
- *Note The soil borings inside Building 1 were labeled as "B9 . . ." and vice versa due to a field error in identifying the building numbers. The soil borings are correctly located on the sample location map (**Figure 2**).

Therefore, seven surface and two subsurface soil samples were analyzed for VOCs, SVOCs, PCBs, and RCRA metals as part of this ESA.

2.4 Sampling Results and Discussions

Soil analytical results are summarized below, and are also presented in **Table 2** in **Appendix D** and in the Laboratory Analytical Reports in **Appendix E**. Field screening readings and soil sample observations are presented in the Soil Boring Log Record forms in **Appendix B** and summarized in **Table 1**.

2.4.1 Contaminant Concentration Screening Values

Soil sample results, for analytes detected in at least one sample (above its minimum laboratory detection limit), were compared to the United States Environmental Protection Agency Residential and Industrial Regional Screening Levels (RSLs), updated November 2018.

For analytes for which RSLs are not established, POTESTA compared those results to West Virginia Department of Environmental Protection (WVDEP) Residential and Industrial Risk Based Concentrations (RBCs). The WV RBCs are established in the Code of State Rules Title 60, Series 3 (60 CSR 3), Table 60-3B, WV De Minimis Levels (Revised 2014), and are used in the WVDEP's Voluntary Remediation Program (VRP). Although this site is not in the VRP, these values are presented to provide additional perspective regarding target analyte concentrations at the site. Additionally, several metals were compared to natural background levels of inorganics

in soil in West Virginia from Table 2-3, West Virginia Voluntary Remediation and Redevelopment Act Guidance Manual (VRRA Guidance Manual).

The West Virginia Voluntary Remediation and Redevelopment Rule (VRRR) states that when a De Minimis Standard for an analyte is less than the natural background, the natural background value may be used in place of the De Minimis Standard. In the section below, POTESTA discusses comparison of the maximum concentrations for several metals to their respective maximum natural background for West Virginia. Published maximum natural background concentrations in West Virginia soil used in this assessment were obtained from Table 2.3 Natural Background Levels of Inorganics in Soil in West Virginia and Surrounding Areas in the VRRA Guidance Manual.

2.4.2 Analytical Results and Screening Summary

2.4.2.1 Parcel 43 Surface Soil

Two VOCs, 16 SVOCs, 6 metals, and 1 PCB aroclor were identified at concentrations above their laboratory detection limits in surface soil on Parcel 43.

Two analytes, arsenic and Aroclor 1242, were detected exceeding their respective Industrial RSLs. However, arsenic was not detected exceeding its maximum natural background for West Virginia.

No other analytes were detected in Parcel 43 surface soil exceeding their respective screening levels.

2.4.2.2 Parcel 43 Subsurface Soil

Three VOCs, 15 SVOCs, and 4 metals were identified at concentrations above their laboratory detection limits in subsurface soil on Parcel 43.

Arsenic was detected exceeding its Industrial RSLs but was not detected exceeding its maximum natural background for West Virginia.

No other analytes were detected in Parcel 43 subsurface soil exceeding their respective screening levels.

2.4.2.3 Parcel 45 Surface Soil

Two VOCs, 15 SVOCs, 4 metals, and 1 PCB aroclor were identified at concentrations above their laboratory detection limits in surface soil on Parcel 45.

Two analytes, benzo(a)pyrene and Aroclor 1242, were detected exceeding its Residential RSL. Arsenic was detected exceeding its Industrial RSL but was not detected exceeding its maximum natural background for West Virginia.

No other analytes were detected in Parcel 45 surface soil exceeding their respective screening levels.

2.4.3 Discussion of Analytes Exceeding Screening Concentrations

Three analytes, benzo (a) pyrene, arsenic, and Aroclor 1242 were detected in site soil exceeding screening standards.

Benzo(a) pyrene was detected in one sample exceeding its Residential RSL. Based on the concentration of the detection and its occurrence exceeding the standard in only one of the samples, POTESTA does not anticipate benzo(a)pyrene to be a contaminant of concern with respect to site development.

Arsenic was detected in numerous samples exceeding its Industrial RSL but was not detected exceeding its maximum natural background for West Virginia. Given that the VRRR allows the use of natural background as a de minimis screening level, POTESTA does not anticipate arsenic to be a contaminant of concern with respect to site development.

Aroclor 1242 was detected in all four open-ground surface soil samples on Parcel 43 at concentrations exceeding its Industrial RBC. It was not detected beneath the buildings or in subsurface soil. Aroclor 1242 was also detected in surface soil on Parcel 45 exceeding its Industrial RSL. Based on the detection of Aroclor 1242 in all of the open-ground surface soil samples on Parcel 43, it is possible that it is present in surface soil throughout the parcel.

2.4.3.1 Aroclor 1242-Impacted Soil

PCBs, such as Aroclor 1242, are regulated by the Toxic Substances Control Act, which is managed by the USEPA. POTESTA's experience is that PCB-impacted soil removal, handling, and disposal will require the approval of the USEPA. The USEPA has several options for cleanup and removal of PCB-impacted soil, but as a rule, POTESTA anticipates that the USEPA will require an assessment/waste characterization plan, a soil management plan (to include appropriate disposal requirements), and a confirmation soil sampling plan.

3.0 FEASIBILITY SITING STUDY

3.1 Site Soils

During the exploration and sampling work which was completed during the various RCRA RFI site investigations at the Site, numerous soil borings and groundwater monitoring wells were drilled using both rotary drilling and direct push techniques. These borings were logged and included in the various historic RFI documents for the site. These include one monitoring well (TMW-9D) and three subsurface borings (AOC11-1, AOC11-2, and AOC11-3) on Parcel 43, and eight monitoring wells (TMW-1D, TMW-12D, and TMW26 thru TMW31) on or near Parcel 45. The approximate locations of pertinent borings are indicated on **Figure 2**. Boring logs obtained

from this previous work generally indicate an unconsolidated soil lithology under both parcels including the previously referenced low permeability clay (logged as clay, silty clay, and/or sandy clay) unit with a thickness of 8 to 10 feet on Parcel 43 and 11 to 20 feet in total thickness on Parcel 45. The clay unit is underlain by dense, interbedded layers of sand with clay and silt which were noted to continue in depth to just above the bedrock surface where an approximate 10-foot layer of sand and gravel was encountered. This bedrock surface was logged as being at an approximately depth of 55 to 60 feet from the ground surface. Copies of these referenced borings logs which were obtained from completed RFI documents provided to POTESTA by BASF/Flint are attached in **Appendix C** of this report.

3.2 Groundwater Occurrence

Regular groundwater sampling has been conducted by BASF as the RCRA permittee of the Flint site and the flow direction and velocity is calculated annually for the site. Depths to groundwater have been regularly gauged in the existing monitoring wells to determine the overall regional site gradient and groundwater flow direction. Based on this information, the groundwater levels and direction of flow are reported to be somewhat stable with the overall gradient and flow direction to be from south to north toward the Ohio River.

Groundwater levels beneath Parcels 43 and 45 are reported to be at an elevation of 526.4 feet near the northern edge of Fifth Avenue to 526.2 feet along the northern parcel boundary. Given the current site grade elevation of approximately 548 feet, the depth to groundwater at the site is expected to be approximately 21 to 22 feet bgs. Given the confirmed presence of a clay layer from near the current ground surface to a depth of 8 feet to 20 feet bgs, the occurrence of groundwater is noted to be below this clay layer.

Previous RFI studies prepared and submitted to the USEPA by BASF indicate the presence of chlorinated volatile organic compounds site wide which are above the recommended minimum constituent levels in groundwater. Analytical results from regular groundwater sampling events are reported to indicate that the concentrations of many of these organic compounds are decreasing, degrading, or are noted to have been replaced by surrogate breakdown products. These factors are noted and referenced to support the RFI's finding that site groundwater contamination is stable and therefore does not pose a threat to human health. This finding is also supported by the presence of the clay confining layer across the site, low groundwater flow velocities, retardation of contaminant with the existing site soil types, and the lack of groundwater users in downgradient areas of the site.

The following excerpt from the 2003 Phase I RFI Report summarizes the current USEPA position on the site with respect to existing groundwater contamination: "direct contact with constituents in soil is not a current exposure pathway, as all uncontrolled areas were evaluated and not found to contain any constituents at concentrations exceeding either EPA or WVDEP criteria. Therefore, the only exposure pathways are either direct contact with groundwater or exposure to vapors generated by the groundwater. Under the conditions documented in 2003, neither of these pathways represented a significant human exposure. Since groundwater concentrations are stable or declining, the conclusion that human exposures are controlled remains valid."

3.3 Existing Site Utilities

In preparation for the ESA subsurface drilling and soil sampling efforts, POTESTA contacted WV811 to clear areas of the planned drilling work of buried site utilities. In addition, two local public utility providers, West Virginia American Water Company and the Huntington Sanitary Board, were also contacted to conduct existing utility location surveys at or adjacent to the site. Due to the density of the planned boring location grid and BASF and Flint's lack of historic knowledge of the previous private utility locations onsite, POTESTA contracted with a private utility locate company to utilize indirect means of locating additional potential buried utility locations across Parcels 43 and 45. A copy of the buried utility location mapping for this project which was prepared by Master Locators prior to the drilling work is attached to this report in **Appendix B**.

The design of any required buried utilities associated with the baseball stadium project should consider limiting the depth of excavations to minimize disturbance to the natural underlying clay layer. This factor and the locations and extent of planned excavations will likely be reviewed by USEPA officials to determine potential impacts the project may have with the current RCRA status of the Site as well as corrective measures which are being evaluated for the Site and surrounding areas of the Flint properties. The main exposure pathway from this Site has been determined to be indoor air intrusion from volatile compounds associated with the underlying groundwater contaminant plume. Deeper excavations, which significantly penetrate the underlying clay layer may result in the USEPA requiring additional and more significant engineering controls to be incorporated into the design of the stadium project to protect from vapor intrusion into the interior spaces of the planned structures.

3.4 Implications of PCB Impacted Soils on Parcel 43

Based on the detection of Aroclor 1242 exceeding its Industrial RBC in all of the laboratory-analyzed open-ground surface soil samples on Parcel 43, it is possible that it is present in surface soil throughout the parcel. Excavation, handling, and/or removal of this material from the site will need to be performed according to plans approved by USEPA prior to construction of the facility.

3.5 Development Restrictions for RCRA Compliance

USEPA RCRA officials have indicated the current and ongoing RCRA site investigations and negotiations should not impact the anticipated reuse of the Site for the construction of a baseball stadium. These planned investigations are focused on the potential for subsurface vapor intrusion to indoor air spaces from volatile organic compounds noted to exist in the site groundwater. Ongoing vapor intrusion studies, when completed, will ultimately lead to the development of a Corrective Measures Study (CMS) at the site by BASF. This CMS document will present the recommended final site remedy alternatives for the entire Flint property including Parcels 43 and 45. Following the approval of the final CMS document by the USEPA, and solicitation of public comment and input, USEPA will formally select the final remedy to be implemented at the site by issuing a Final Decision and Response to Comments document. USEPA is anticipating that the

proposed final remedy for Parcels 43 and 45 (including AOCs 4, 8, 10, and 11) will include, at a minimum, long-term groundwater monitoring to confirm plume stability and the documentation of any changes to the current contaminant levels and extent of the impacted groundwater plume. Additionally, USEPA is assuming that the following activities and use restrictions may be incorporated:

- 1. The design and incorporation of a vapor intrusion control system to be proposed and approved in advance of any construction by the EPA. The proposed system shall be installed in each new structure which is constructed above or within 100 feet around the perimeter of the volatile organic compound groundwater plume, delineated in the RCRA study documents.
- 2. Prior to any earthwork activities, a Soils Management Plan will be developed and submitted to EPA for review and approval for all areas of the work site where any contaminants remain in the soils at levels above EPA's screening levels for non-residential use or groundwater above federal maximum contaminant levels (MCLs).
- 3. The current owner of the site shall agree to allow EPA, WVDEP, and/or their authorized agents and representatives, access to the parcels to inspect and evaluate the continued effectiveness of the Final Remedy and, if necessary, to conduct additional remediation to ensure the protection of the public and the environment based on the Final Remedy which is selected.
- 4. A groundwater use restriction must be maintained for the property by owner. The groundwater may not be used for any purposes other than the operation, maintenance, and monitoring activities required by the EPA.
- 5. No new monitoring wells shall be installed on the property.

RCRA compliance on Parcels 43 and 45 should not limit the development alternatives afforded HMDA and/or Marshall with respect to the construction of a new baseball stadium. The USEPA will continue to require the RCRA permittee (BASF) to perform all necessary environmental investigations and all monitoring activities, institutional control, or other corrective actions selected by the agency. The USEPA does not anticipate requiring others such as HMDA or Marshall to perform active corrective actions at the Site; however, the owner will be held responsible for implementing and maintaining all of the activity and use restrictions selected for the site and described in the site's Final Remedy.

It should be noted that USEPA Region III permitting officials may require submittal of the facility construction plans for review prior to construction in order to review any vapor intrusion controls which are being proposed. This review will also likely include an evaluation of the depth of excavation and to what extent these excavations are impacting the underling clay layer at the Site.

3.6 Vapor Intrusion Barriers for Indoor Spaces

Since VOC groundwater contamination beneath the site has been detected, the potential exists for vapor intrusion and collection of volatilized COCs to interior spaces of existing and proposed structures at this site. The RCRA RFI studies have focused on the potential for vapor intrusion, and these documents, as well as recent EPA correspondence, indicate that engineering controls such as vapor intrusion control systems/barriers, should be considered for all planned structures.

Since the facility will likely be constructed as slab-on-grade construction, the incorporation of some type of subgrade vapor barrier should be considered for all constructed buildings, adequate ventilation afforded in the design of all ground level storage spaces, and properly sized HVAC systems for finished interior areas to ensure the proper turnover of interior air. Since the playing field will be open, no additional measures would be required at field level.

3.7 Limitation of Excavation Depths

The presence of a naturally occurring clay layer beneath both Parcels 43 and 35 has been verified in the RCRA RFI documents. This clay layer varies in total thickness across the site from 8 to 20 feet. The USEPA has determined that this impermeable clay horizon provides a barrier across the site minimizing the potential for vapor intrusion of organic volatile compounds into existing or proposed interior spaces.

The plans for the proposed facility should consider limiting the depth of any required subsurface excavations including foundation subgrade depths, site grading excavations, and utility installation to ensure limited disturbance to the clay layer. Geotechnical exploration should be carried out during the site design to better understand the depth, thickness and extent of this clay horizon. Some elements such as the light tower support foundations, elevator shafts, etc. may require deeper drilling or excavation, but should be limited to exterior portions of the planned construction. If an interior application is required, additional engineering controls must be considered in the design to minimize the potential for the migration and accumulation of volatized vapor to interior spaces.

In the event that deeper excavations are required, environmental risk analysis modeling may be required to determine if minimum threshold values for indoor air quality would be triggered prior to finalizing the design documents. Should these risk models indicate potentially unacceptable exposures to volatile compounds, alternate designs may be required, or more extensive engineering controls may have to be considered for the project.

3.8 NPDES Construction Stormwater Permitting

The construction of the planned baseball stadium and associated parking lot will require disturbance of an area which will exceed the minimum thresholds, requiring that the project will be regulated under the WVDEP Construction Stormwater Program. Given the overall schematic plan for the facility, it is likely that the construction activities will disturb in excess of 3 acres, requiring that a Site Registration Application Form be prepared and submitted to the City of Huntington and the WVDEP – Division of Water and Waste Management for review and approval

60 days prior to the initial planned disturbance. This form submittal requires application contact information, planned project description, construction timeline, etc. as well as specifics related to the erosion and sedimentation control devices to be utilized to limit offsite migration of entrained sediment in runoff leaving the site. A detailed erosion and sediment control plan must be attached to the application form. The application must also include a Stormwater Pollution Prevention Plan (SWPPP) providing details of the vegetative and structural controls to be installed at the site which must be inspected and maintained during the duration of the site construction activities.

3.9 Municipal Separate Storm Sewer Systems (MS4) Compliance Requirements

Since this project is situated within the corporate boundaries of the City of Huntington, the disturbance will also be regulated under the Municipal Separate Storm Sewer Systems (MS4) program. In 1999, the USEPA promulgated rules which established requirements for the State to permit stormwater discharges from small MS4 urbanized areas. By definition, a regulated MS4 includes storm drain conveyance systems owned or operated by the State, City, or Federal entity, Town, or other public entity where stormwater discharges into waters of the United States. The federal regulations establish six categories of minimum control measure that must be implemented by permittees. Best Management Practices (BMPs) are to be proposed and utilized to implement the six minimum control measures in order to achieve an overall reduction of the amount of pollutants discharged in runoff from urban development areas. Each of the designated MS4 urban communities were then required to prepare a stormwater management plan indicating the regulatory review and approval structure for evaluating and permitting new development sites based on format and criteria prepared by the WVDEP. The City of Huntington's plan, which is managed through their Stormwater Utility, was reviewed and approved by the WVDEP. West Virginia's minimum control measures adopted BMPs include a "1-inch capture" requirement, which is unique to West Virginia when compared to other States.

The program requires that releases of stormwater from newly developed or redevelopment areas within the City's Stormwater Utility jurisdiction be managed for potential impacts of stormwater discharges to receiving streams. In short, the program limits the amount of stormwater volume from new imperious areas associated with development or redevelopment in urban areas. The MS4 is regulated on the municipal level through the City of Huntington's Stormwater Utility and a formal submittal is required for approval prior to issuance of a construction permit. The program requires that all areas planned for new development or redevelopment must provide measures onsite to management and control the initial 1-inch of rainfall from planned impervious areas of the site by utilizing runoff volume reduction methodology and stormwater control practices such as bioretention cells, porous pavement, grassed swales, amended soils, and vegetated roofs. The requirements allow for a reduction of 0.2 inch for areas of redevelopment, which would apply to the parking lot area situated on Parcel 45, if the new parking lot is not expanded to a larger coverage area than currently exists. Credits will also apply to Parcel 43 for the square footage of building roof area for those existing warehouse structures which will be demolished prior to construction.

In order to manage stormwater from impervious areas of the site, the accumulated stormwater (up to the initial 1-inch of rainfall from each precipitation event) must be collected and conveyed to a stormwater control system onsite. This control measure will promote collection and infiltration of

stormwater runoff directly to the subgrade soils, thus minimizing the volume of runoff entering the City's stormwater conveyance system and then being discharged to surface water receiving streams. Given the current RCRA status of this site as well as the focus on the current groundwater contamination, the infiltration of additional runoff to the subsurface groundwater system in this area can have both short- and long-term implications. If the direct infiltration to groundwater is pursued at this site with the proposed development, any changes to the current groundwater flow regime could be regarded by the current RCRA permittee as a change which was caused by HMDA and/or Marshall as the property/facility owner. This could open HMDA and/or Marshall up to potential future environmental liabilities associated with Parcels 43 and 45.

The current groundwater flow regime at this site has been studied and determined to be stable given the current reduction in contaminant concentrations. The degradation of soluble compounds, low flow velocities, and contaminant retardation within the subgrade aquifer soil types have all been presented as reasons why the current containment plume is stable and therefore does not present a threat to human health and the local environment. The presence of the clay layer also provides a barrier and limits a potential pathway for the migration of organic volatilized compounds into existing or planned structures. This clay layer, given its relatively low permeability does not promote infiltration limiting the potential and effectiveness for the infiltration of collected stormwater from the site. Any changes to the current groundwater flow through extraction or addition of infiltrated surface water could result in changes to the flow direction, velocity, and/or mobilization of existing contamination beneath the site. Furthermore, the excavation required to install subsurface stormwater control measures will require removal and disturbance to the natural clay layer.

Given the potential liabilities associated with the delineated groundwater contamination at this site, any changes to the groundwater flow regime in this area raises serious concerns about the potential migration of contaminants which are documented to exist at this site. The risk of potentially adding infiltrated surface water beneath this site and causing instability or changes to the current condition of the groundwater contaminant plume are high; therefore, serious consideration should be given in the site design aspects of this project. Alternative methods of managing the initial 1-inch of runoff should be studied and considered other than the direct infiltration of runoff to the site groundwater aquifer. These alternatives may include reuse aspects for irrigation of the collected stormwater volume, routing of collected stormwater volumes through bio-retention swales or "rain gardens" prior to release to the City's stormwater conveyance system, etc.

4.0 CONCLUSIONS

POTESTA's review of available information and ESA activities have identified the following sitespecific conditions at the Site that have the potential to impact development, either during construction or post-construction use:

• Site history as chemical manufacturing facility and associated RCRA permitting status (see **Section 1.2**)

- PCB Aroclor 1242 contamination in surface soils on Parcel 43 (see **Section 2.4.3.1** and **Section 3.4**)
- Naturally occurring clay layer present at depths of 8 to 20 feet bgs (see **Sections 2.1, 3.1, and 3.7**)
- Groundwater contaminant plume beneath Site and associated potential for vapor intrusion within structures (see **Sections 3.2** and **3.6**)
- Development restrictions for RCRA compliance (see **Section 3.5**)
- MS4 requirements and site-specific considerations (see **Section 3.9**)

POTESTA believes these site-specific conditions may represent a significant cost increase versus development of a previously undeveloped (i.e., "green field") site, but they can be managed to allow the Site's development with the benefits of the preferred location and returning the site to active use. We look forward to working with HMDA and Marshall to develop this Site as Marshall's new baseball facility.

5.0 CLOSING

This report has been prepared to assist HMDA in evaluating and planning with respect to the subject site. HMDA and POTESTA mutually devised the scope of this study, and are limited to the specific project, location and time-period described herein. The report represents POTESTA's understanding of the site conditions as discernible from information provided by others and obtained by POTESTA using the methods specified. POTESTA assumes no responsibility for information provided or developed by others, or for documenting conditions detectable with methods or techniques not specified in the scope of services. In addition, no activity, including sampling, assessment or evaluation of material or substance, may be assumed to be included in this study unless specifically considered in the scope of services and this report. Sketches and maps in this report are included only to aid the reader and should not be considered surveys or engineering studies. If additional data concerning this site become available, POTESTA should be informed so that we may examine the information and, if necessary, modify this report accordingly.

Respectfully submitted,

POTESTA & ASSOCIATES, INC.

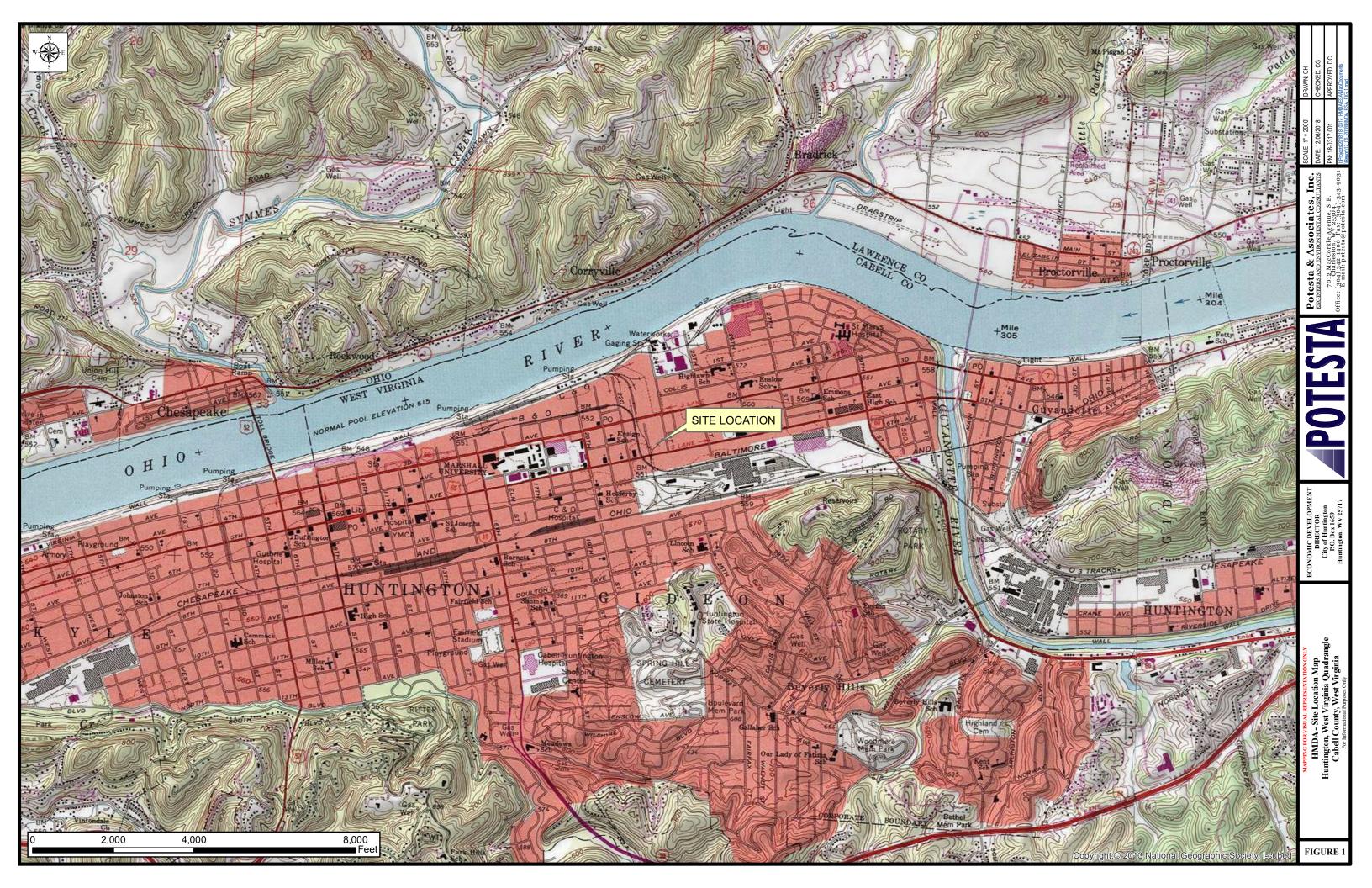
David J. Corsaro, LRS Senior Scientist

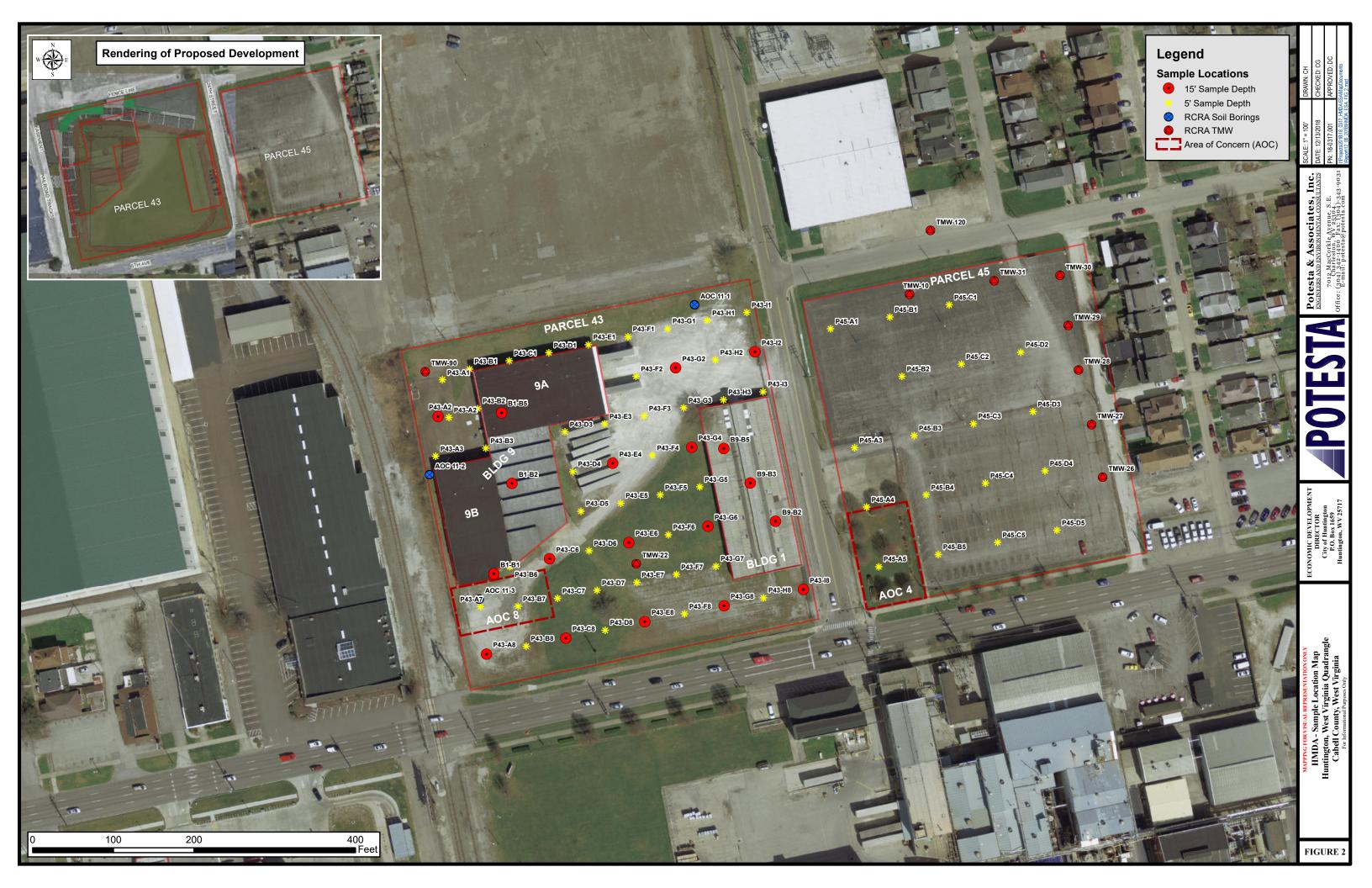
Chris A. Grose, LRS

Senior Engineering Associate I

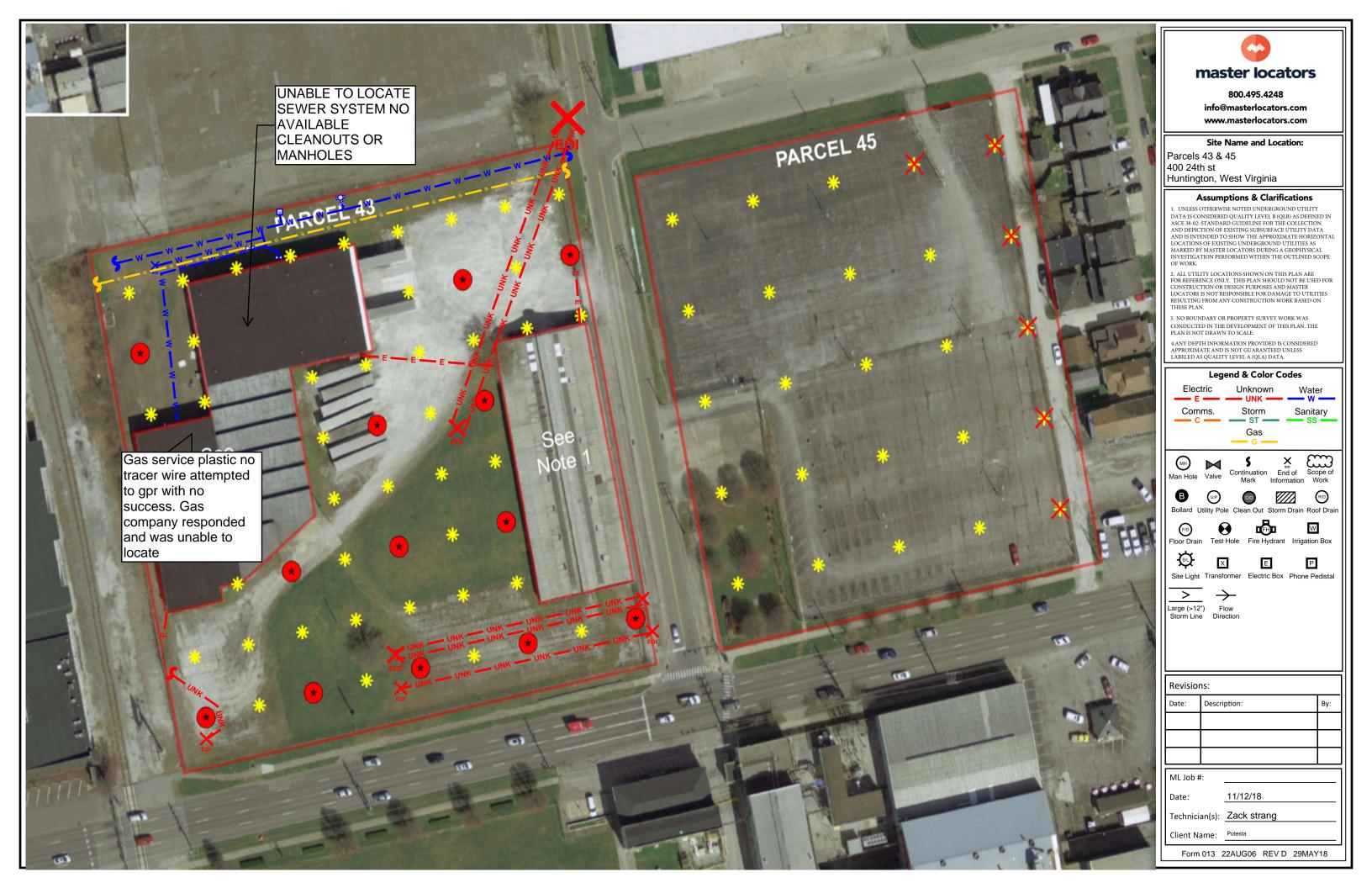
DJC:CAG/mh

APPENDIX A





APPENDIX B



Field Service Report

*Formal invoice to follow

Other Survey Methodology:



Company: Potesta & Associates, Inc							Project: Huntington	Parcels 43 & 45				
	stomer Cont n Bailey	act:					ML Job#:					
	d Technicia	n:					Field Ass	sistant:				
Site	Address: 498 24th St				Project Coordinator: John Bogedain							
D	ate:	Tech#:	STD	Hours:		OT Hours:	Begin:	Onsite:		Offsite:	End:	
I-16-	2018	1	4		0							
Ser\	GPR Surve	-	apply)	•		EM Scan			0	Air/Hydro Excavati		
0	Concrete S Leak Detec Other	can tion - Helium		C		CCTV Pipe Ir Fault Locate	nspection		0	Leak Detection - A Surveying & Mapp		
②	Conditions: (Saturated Sand	Check all that apply)	C		Dry Other			0	Clay		
O Mos		one: (Check all that s	analu)	C)	Other						
	Clear Snow	ons: (Check all that a	арріу)	•		Overcast Other			0	Rain		
Utilit		Designated: (Check	all that a	pply)								
⊘⊘⊘	Gas Fiber Opti Sewer Unknown	С				Water Comm Rebar None				Electric Storm UST Other		
Deli¹ ○ ⊘	verable Requ Plan Mark Sketch	est : (Check all that Up	apply)	C		Engineering Other	ı Report		0	CAD Update		
Deli	verable Provi	ded Onsite : No										
Sur	vey Metho	odologies:										
Knc	own Utilities:		Unk	Known Util	lities	s:	(Grid Spacing):					
②	Utilities with	nin Scope of Work:	Ø	Passive S	Scan	is:	10ft					
②	Utilities out	side Scope of Work:	Ø	Split Box	Sca	ns:	10 ft					
⊘	Building Fe	eds:	Ø	GPR Sca	ns:		10 ft					

Full Scope of Work:				
Locate all utilities within 2 sites and clear approximately 76 b	orings			
Additional Resources:				
Result And Notes:				
Monday-Locate all surface features throughout parcel 43. C no tracer wire, gas company is scheduled to come out. No e				
Tuesday-completed clearing borings throughout parcel 43. A to be on site for borings due to 30â water main being in area concrete. Sewer company is coming out Wednesday to performultiple places through property.	a. Inside s	scan of one building completed. Sewer ma	anhole located inside b	uilding that has been back filled with
Wednesday- completed clearing borings throughout parcel 4 verified to connect to parcel 43 through the use of dye test. I back and vpi. Gas company cleared their row and located gas main through the control of the c	ine was	partially blocked and unable to continue of	nto parcel 43 property.	They will be jetting the line to come
that is plastic with no tracer wire. Thursday-completed scan of 2nd inside building and refreshme to wait and keep property unlocked. Sewer company did connected to sewer system again but suspected p-trap to sto	not show	up and called and verified I was leaving	with Ryan at 7:15. Atte	mpted to duct rod storm drains thAt are
Friday-potesta contacted the sewer company and the sewer asphalt on back of loading dock north side. They advised the for any issues with the sewer.				
Client Communication:				
Andrew was on site				
Recommended Services: (Check all that apply)				
GPR Survey Concrete Scan Leak Detection - Helium Other	0	EM Scan CCTV Pipe Inspection Fault Locate	0	Air/Hydro Excavation Leak Detection - Acoustic Surveying & Mapping
Client PO#:				
Fieldwork Complete: YES		Date: 11-16-2018 11:00 A	М	
Contacts on Site:				
Ryan bailey, potesta, 304.982.1887		Signature:		



Date: Name:

"Take 5" for Safety

Have all cre Crew Meml for the task	ew members reviewed the JHA/Safet bers: With my signature, I acknowled s and understand the hazards and co	lge that	Tyvek suits Observation Tripod/W inch edures developed for the job task?: Yes t I have reviewed the JHA(s)/Safety Procedu	ures	Safety Gloves Sanitize Harness
Have all cre Crew Meml for the task	x Overalls rotection conitor ew members reviewed the JHA/Safet bers: With my signature, I acknowled s and understand the hazards and con k strang	ty proce	Tyvek suits Observation Tripod/W inch edures developed for the job task?: Yes t I have reviewed the JHA(s)/Safety Procedu needed to perform my work safety		Sanitize
Have all cre Crew Memb	coveralls rotection conitor ew members reviewed the JHA/Safet bers: With my signature, I acknowled s and understand the hazards and co	ty proce	Tyvek suits Observation Tripod/W inch edures developed for the job task?: Yes t I have reviewed the JHA(s)/Safety Procedu needed to perform my work safety		Sanitize
Have all cre	x Overalls rotection politor ew members reviewed the JHA/Safet bers: With my signature, I acknowled	ty proce	Tyvek suits Observation Tripod/W inch edures developed for the job task?: Yes t I have reviewed the JHA(s)/Safety Procedu		Sanitize
Have all cre	x Overalls rotection pnitor ew members reviewed the JHA/Safet	by proce	Tyvek suits Observation Tripod/W inch edures developed for the job task? : Yes		Sanitize
0	x Overalls rotection onitor		Tyvek suits Observation Tripod/W inch		Sanitize
O Gallon	x Overalls rotection onitor		Tyvek suits Observation		Sanitize
0.1	x Overalls rotection	○○○	Tyvek suits Observation		Sanitize
Air M c	x Overalls		Tyvek suits		•
				\checkmark	
Observ	votion/inanget for trip barrards		Maintain awareness of surroundings	_	Make others aware of work area
•	barricades/cones		Review Heat Stress Symptoms	Ø	Review Cold Stress Symptoms
Hard FSafety			Safety Toe Boots Proper Lifting Techniques		Hearing Protection Safe Electric handling
Defense/Cor			0.4.7.8.4		11
High V	enicular/Fedestrian Tranic	0	Other		
	n Deficiency /ehicular/Pedestrian Traffic	0	Trench Collapse Other		Exposure to Biological Hazards
Old S	Stress Potential		Loud Noise (>85 DB)	Ö	Flying Debris
Slips,Pinch ∣	-		Active Construction		Heat Stress Potential
- 0"	Fror Likely Situations:		ck all that apply) Hand Hazards		Muscle Strain
Power	10010	0	Laudoi OSG	0	Guiot.
HeavyPower			HandTools Ladder Use	0	Entering Trench Other:
Vacuu	m Hose Use	Ŏ	Video Pipe Inspection	Ö	Confined Space Entry
Vacuu	m Excavation		Saw Cutting		Air Lance/Tools
	lest Scans	⊘	Access Manhole		Connect to Electric
Critical Ste			Duct Rodder		SmartCart Scans
	200:				
Leak L Inside		\circ	Survey & Mapping	\circ	Concrete Court
	Borings ocate	0	Vacuum Excavation Fault Locate	0	CCTV Pipe Inspection Concrete Scan
Utility I			Scan Area	\bigcirc	Scan Trench
Tasks:					
400-498 24 Huntington,	th St				
Zack strang	e & Location:		11-16-2018 08:45 AM		
"Take 5"	conducted by:		Date & Time:		
Project C John Boged	oordinator: _{dain}		Lead Technician: Zachary Strang		
	Associates, Inc		ML-110618-12756		
Account r			ML Job#:		

Time:

Signature:

APPENDIX C

POTESTA LOGS

BORING NO.		B1 B1		
PAGE	1	OF	1	

Clien	t :	Huntington Municipal Development Authority Pro	ject No.	.: 0	101-1	18-0	317					
Proje	ct Na	me: Flint Parcels 43 and 45 Sampling Box	ring Me	ing Method: Geoprobe								
Locat	ion :	Huntington, West Virginia We	ather/ T	emp.	<u> </u>	Rain	y 33	3°				
Start	Date	: <u>11-15-18</u> Field Engineer /	Geologi	st: _	Andı	rew	Grii	nme	tt			
Comp	oletio	n Date: 11-15-18 Driller: AZO	ONE									
	rface Elevation : Benchmark/Elev. : ter Level Observations : Immediate : At completion/# hours /											
Statio		Offset :	-				ng I)ept	h:	15.0 F	t.	
			pe		_					J		
m tion/ r (ft.)	logy		e Tyl	<u>e</u> _		lue	ure	/ery		nf. ⁰ ., Ts	PID (ppm)	
Stratum Elevation/ Depth (ft.)	Lithology	Soil/Rock Description	Sample Type /Number	Sample Depth	SPT Blows	N-Value	Aoist %)	Recovery (%)	RQD (%)	Unconf. Comp., Tsf	PB BB	
	1	CONCRETE	N C		УЩ		<u> </u>		<u> </u>			
0.3	$\tilde{\chi}$	GRAVEL, No Odor Brown SANDY CLAY, with Black, Brown, and Gray Gravel (FILL),	- GG 1								0.2	
0.6		Slight Odor from 3' to 3.5'	SS-1	\							0.2	
				7]								
3.7		Grayish Brown SILTY CLAY, Medium Stiff, No Odor	SS-2	$\langle $							23.6	
4.2	./././	No Recovery		1								
	1.7.7	Orangeish Brown SILTY CLAY, Medium Stiff, No Odor		5_								
5			SS-3								3.1	
				\ -								
				7 -								
			SS-4								8.7	
				10								
				10_								
			SS-5								4.5	
			33-3	\							4.3	
	/: /: / : /: /: /											
			_ \									
13.5		Orangeish Brown to Brown SANDY CLAY , with Clayey Sand, Soft, No Odor	SS-6	$\langle $							0.6	
1.5		POTTOM OF POPING (151)		15								
15		BOTTOM OF BORING (15')										
			BOI	20 RING M	ЕТНО	OD			SAMI	PLE TY	PE	
	4P	7012 MacCorkle Ave., SE	HSA - H SFA - S							Spoon S by Tube		
	ľ	Charleston, WV 25304 Telephone: 304-342-1400	CC - C	Concrete	Coring		F	RC .	Rock	Core Sa		
		Telephone: 304-342-1400	MD - M HA - H				F	BS ·	- Bag	Sample		
			RC - F									

BORING NO.		B1 B2		
PAGE	1	OF	1	

Client: H	Huntington Municipal Development Authority	Pro	ject No.	.: ()101-	18-0	317				
Project Nar	ne: Flint Parcels 43 and 45 Sampling	Bor	ing Met	thod :	G	eopi	robe				
Location:	Huntington, West Virginia	Wea	ather/ T	emp.	: <u>l</u>	Rain	y 33	S°			
Start Date :	: <u>11-15-18</u> Field Eng	ineer/ (Geologi	st:	And	rew	Grir	nme	tt		
Completion	Driller :	AZO	NE								
Surface Ele Water Leve	evation : Benchma Benchma el Observations : $\overline{\lor}$ Immediate :		comple	tion/#	hou!	rs /					
Station:	Offset :					_	ng I)eptl	h: _	15.0 F	t
Stratum Elevation/ Depth (ft.) Lithology	Soil/Rock Description		Sample Type /Number	Sample Depth	SPT Blows	N-Value	Moisture (%)	Recovery (%)	RQD (%)	Unconf. Comp., Tsf	PID (ppm)
0.3	CONCRETE GRAVEL SANDY CLAY, with Gravel and Trace Glass, Medium Stiff, No Odo (FILL) Orangeish Brown SILTY CLAY, Medium Stiff, No Odor No Recovery	r	SS-1	-							0.5
5	Orangeish Brown SILTY CLAY, Medium Stiff, No Odor		SS-2	5							0.2
8	Orangeish Brown SILTY CLAY, Soft, No Odor		SS-3	10							0.5
10	No Recovery			-							
15	POTTOM OF PODING (15)			15_							
15	BOTTOM OF BORING (15')			- - - 20							
△P	7012 MacCorkle Ave., S Charleston, WV 25304 Telephone: 304-342-14		HSA - H SFA - S CC - C MD - M HA - H	olid Fli Concrete Aud Dri	Stem A ght Au Corin lling	uger	S	SS - ST - RC -	Split Shell Rock	Spoon S by Tube S Core Sa Sample	ample Sample

BORING NO.		B1 B5		
PAGE	1	OF	1	

Clien	t:	Huntington Municipal Development Authority	Pro	ject No	.: <u>(</u>	0101-	18-0	317					
Proje	ct Na	me: Flint Parcels 43 and 45 Sampling	Bor	ring Method: Geoprobe									
Locat	tion :	Huntington, West Virginia	_ Wea	eather/ Temp.: Rainy 33°									
Start	Date	: 11-15-18 Field Eng	gineer/ (Geologist: Andrew Grimmett									
Comp	pletio	n Date : 11-15-18 Driller :	AZO	NE									
Surface Elevation : Benchmark/Elev. : Water Level Observations :													
Stati	on:	Offset :				_ I	Bori	ng I)ept	h:	15.0 F	t	
Stratum Elevation/ Depth (ft.)		Soil/Rock Description		Sample Type /Number	Sample Depth	SPT Blows	N-Value	Moisture (%)	Recovery (%)	RQD (%)	Unconf. Comp., Tsf	PID (ppm)	
0.4)	CONCRETE SANDY CLAY, Brown, Black, and Red, with Gravel, Brick, and CorFragments (FILL), Slight Odor from 3' to 3.5', with Glass	ncrete	SS-1	-							0.8	
				SS-2								0.6	
4		No Recovery			5								
5	0000	Loose GRAVEL , with Sandy Clay, Tan, Gray, Black, and Red, with Concrete and Glass, No Odor	Brick,		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \								
6.5	RXX	Gray SILTY CLAY, Soft, No Odor		SS-3	λ .							2.1	
7.2	KKK	Orangeish Brown SILTY CLAY, Medium Stiff, No Odor			/\								
8		No Recovery			10_								
10		Orangeish Brown SILTY CLAY, Soft, No Odor		SS-4	-	-						0.4	
13.8	/// ////	Orangeish Brown to Brown SANDY CLAY, No Odor		SS-5	15							0.5	
15		BOTTOM OF BORING (15')			20								
					RING N						PLE TY		
	P	7012 MacCorkle Ave., S Charleston, WV 25304 Telephone: 304-342-14		HSA - I SFA - S CC - G MD - I HA - I RC - I	Solid Fla Concrete Mud Dra Hand A	ight Au e Corin illing ager	iger	S	T - RC -	Shell Rock	Spoon S by Tube a c Core Sa Sample	Sample	

BORING NO.		B9 B2		
PAGE	1	OF	1	

Clien Proje Locat	ct Na		and 45 Sampling	Bo	oject No. oring Met eather/ T	hod :		18-0 leopi Rain	robe				
Start Comr				Field Engineer. Driller: AZO	U	st:	And	rew	Grir	nmet	t		
	<u> </u>												
	reface Elevation : Benchmark/Elev. : Vater Level Observations : ✓ Immediate : ▼ At completion/# hours /_												
	tation: Offset: Boring Depth: 4.5 Ft.												
Stratum Elevation/ Depth (ft.)	Lithology		Soil/Rock Description		Sample Type /Number	Sample Depth	SPT Blows	N-Value	Moisture (%)	Recovery (%)	RQD (%)	Unconf. Comp., Tsf	PID (ppm)
0.2		ASPHALT Loose GRAVEL, Gray, Brow Brick Fragments, Slight Odor	vn, and Black, with Sandy	Clay and Red	SS-1	_							5.4
2.5		No Recovery Refusal at 4.5', Pieces of Bric				- -							
4.5		BOTTOM OF BORING (4.	5')			10							
	P	OTESTA	7012 MacCork Charleston, WY Telephone: 30	V 25304	HSA - H SFA - Sc CC - C MD - M	olid Fli oncrete Iud Dri	Stem A ght Au Corin lling	uger iger	S	S - ST - RC -	Split Shell Rock	Spoon Solve Suppose Su	ample Sample

BORING NO.		B9 B3		
PAGE	1	OF	1	

Client	t: _	Huntington Municipal Development Authority	yPro	ject No.	: _0	101-	18-0	317				
Proje	ct Na	me: Flint Parcels 43 and 45 Sampling	Bor	ing Meth	od:	G	eopi	robe				
Locat	ion :	Huntington, West Virginia	Wes	ather/ Te	emp.	: _]	Rain	ing :	37°			
Start	Date	: 11-15-18	Field Engineer/	Geologis	t:	And	rew	Grir	nme	tt		
Comp	letio	n Date: 11-15-18	Driller: AZO	NE								
Surfa	Surface Elevation : Benchmark/Elev. :											
Wate	r Lev	el Observations : $\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	▼ At	completi	ion/#	hou	rs <u>/</u>					
Statio	on:	Offse	t:			_ F	Bori	ng D	eptl	h: _	15.0 F	t
Stratum Elevation/ Depth (ft.)	Lithology	Soil/Rock Description		Sample Type /Number	Sample Depth	SPT Blows	N-Value	Moisture (%)	Recovery (%)	RQD (%)	Unconf. Comp., Tsf	PID (ppm)
		CONCRETE		1 1/								
1.2		Loose GRAVEL , Gray, No Odor Orangeish Brown SILTY CLAY , Medium Stiff, No Od	or	SS-1	-							0.1
				SS-2	5_							0.4
7.2	x	Orangeish Brown SANDY CLAY , Soft, No Odor		SS-3	-							0.2
,				SS-4								0.3
9		No Recovery			10							
10		Orangeish Brown SANDY CLAY to CLAYEY SAND	, Soft, No Odor	SS-5								0.3
12		No Recovery			15							
15		BOTTOM OF BORING (15')										
					20		O.F.					
	4	ATPATA 7012 MacCorkle	e Ave SF	HSA - Ho	ollow S	Stem A	uger	S	SS -	Split	PLE TYI Spoon S	ample
	P	OTESTA Charleston, WV Telephone: 304	25304		oncrete ud Dril	Corin lling		F	RC -	Rock	by Tube S Core Sa Sample	

BORING NO.		B9 B5		
PAGE	1	OF	1	

Client:	Huntington Municipal Development Authority	Proj	ject No.	: 01	01-18-	0317				
Project Name: Flint Parcels 43 and 45 Sampling Bor		ing Metl	nod:	Geor	robe					
Location: Huntington, West Virginia Weather/ Temp.: Rainy 33°										
Start Date		Field Engineer/ (Geologis	t: _	Andrew	Grii	nme	tt		
Completio	Completion Date: 11-15-18 Driller: AZONE									
Surface E	levation : F	Benchmark/Elev	·:							
	vel Observations : $ op$ Immediate :		complet	ion/# l	_	_				
Station : Offset : Boring Depth: 4.5 Ft.										
Stratum Elevation/ Depth (ft.) Lithology	Soil/Rock Description		Sample Type /Number	Sample Depth	Blows N-Value	Moisture (%)	Recovery (%)	RQD (%)	Unconf. Comp., Tsf	PID (ppm)
0.2		ncrete Pieces, No	SS-1	-						0.4
2.5	No Recovery Refusal at 4.5', Concrete in End of Spoon			-						
4.5	BOTTOM OF BORING (4.5')			10						
P	7012 MacCorkle Charleston, WV Telephone: 304	25304	HSA - Ho SFA - So CC - Co MD - Mo HA - Ha	ollow Stollid Fligloncrete (ud Drilli	nt Auger Coring ing	S	SS - ST - RC -	Split Shell Rock	PLE TYPE Spoon Sa by Tube Sa Core Sa Sample	ample Sample

BORING NO.		P43 A1		
PAGE	1	OF	1	

Clien	_	Huntington Municipal D	evelopment Authorit	•	ject No.		0101-	18-0)317	,			_
Proje					ing Met			eop					
		Huntington, West Vir	ginia		ather/ T	-	_		_				
Start	Date			Field Engineer/	Geologis	st:	And	rew	Grii	nme	tt		
Comp	letio	n Date: 11-16-18		Driller: AZO	NE								
Surfa	Surface Elevation: Benchmark/Elev.:												
Wate	Vater Level Observations : ✓ Immediate : ✓ At completion/# hours /												
Statio	Station: Offset: Boring Depth: _5.0 Ft.												
`					, be							j	(r
um tion (ft.	logy				le Ty ber	le (o o	lue	ure	very		nf. 2., Ts	РІD (ррт)
Stratum Elevation/ Depth (ft.)	Lithology		Soil/Rock Description		Sample Type /Number	Sample Depth	SPT Blows	N-Value	Moisture (%)	Recovery (%)	(%)	Unconf. Comp., Tsf	PID
	<u>і</u>	¬GRAVEL, with Sandy Clay,	-		01	021	У					1	
0.2		SILTY CLAY, with Trace G Brown, No Odor (FILL)	bravel, Medium Stiff, Brov	vn to Grayish	l \/	_							
		Brown, 140 Odor (FILL)			SS-1								0.4
2.1		CLAYEY SAND, with Grav	ey, Dark Gray with Brown	n and Red, Slight		-							0
2.6	$\langle \chi \rangle$	\tag{Odor(FILL)} SILTY CLAY, Gray to Gray	rish Brown, Soft, No Odor] /\	-							
3.5	1.1	No Recovery	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		_	_							
						5							
5		BOTTOM OF BORING (5')			3_							
						_							
						_							
						-							
						_							
						10							
						10_							
						-							
						_							
						-							
						_							
						15							
						15_							
						-							
						_							
						-							
						_							
						20							
						ING N	ÆTH					PLE TY	
	4R	ATTCTA	7012 MacCork		HSA - H SFA - Se							Spoon S by Tube S	
	ľ	OTESTA	Charleston, W		CC - C	oncrete	Corin		I	RC -	Rock	Core Sa	
		— 1 — • 1/1	Telephone: 30	14-342-1400	MD - M				I	3S -	Bag	Sample	

BORING NO.		P43 A2		
PAGE	1	OF	1	

Client	t :	Huntington Municipal Development Authority Pro	oject No.	: 01	01-18-	0317	,					
Proje	_		ring Metl		Geor							
Locat	ion :	Huntington, West Virginia We	eather/ To	emp. :	Sur	ny 3	5°					
Start	Date	: 11-16-18 Field Engineer/	Geologis	st: _	Andrev	Gri	mme	tt				
Comp	letio	n Date: 11-16-18 Driller: AZC	ONE									
Surfa	urface Elevation : Benchmark/Elev. :											
Water	Vater Level Observations : ✓ Immediate : ✓ At completion/# hours /_											
Statio	tation: Offset: Boring Depth: _15.0 Ft.											
Stratum Elevation/ Depth (ft.)	Lithology	Soil/Rock Description	Sample Type /Number	Sample Depth	Blows N-Value	Moisture (%)	Recovery (%)	RQD (%)	Unconf. Comp., Tsf	PID (ppm)		
	300	ASPHALT SANDY CLAY, with Gravel, Brown to Dark Gray, Slight Odor (FILL)	/ //									
		SAID I CLAI, with Graver, Brown to Bank Gray, Slight Gdor (FIEE)	SS-1							2.1		
2.5	X X X X	Grayish Brown SILTY CLAY, Soft, No Odor	$-$ /\									
3	/\\ X/	No Recovery										
				-								
5	$\langle \zeta \rangle$	Gray with Orangeish Brown SILTY CLAY, Soft, No Odor		5_								
5.7		Orangeish Brown SILTY CLAY, Medium Stiff, No Odor	SS-2	-						0.4		
			SS-3 SS-4	10_						0.5		
13.5	$\langle i \rangle \langle i $	Orangeish Brown SILTY CLAY, Soft, No Odor	SS-5	_						0.6		
14	$\langle \langle \chi \rangle \rangle$	Orangeish Brown SILTY CLAY, with Trace Sand, Soft, No Odor		15								
15	* //. \	BOTTOM OF BORING (15')										
				20								
		7012 MacCorkle Ave., SE	HSA - He	ING ME ollow Ste		r S			PLE TYI Spoon S			
	P	Charleston, WV 25304 Telephone: 304-342-1400	SFA - So CC - Co MD - M HA - Ha	olid Fligh oncrete C lud Drilli	nt Auger Coring ng	[]	ST - RC -	Shell Rock	by Tube & Core Sa Sample	Sample		

BORING NO.		P43 A3		
PAGE	1	OF	1	

Client	t :	Huntington Municipal Development Authority P	Project No.	: 0)101-	18-0)317					
	_		Boring Met									
Locat			Veather/ T									
Start	Date	: 11-16-18 Field Enginee	r/ Geologis	st:	And	rew	Grii	nme	tt			
Comp	letio	n Date : 11-16-18 Driller : AZ	ZONE									
Surfa	urface Elevation : Benchmark/Elev. :											
Water	Water Level Observations : ✓ Immediate : ✓ At completion/# hours /_											
Statio	on:	Offset :			_ F	Bori	ng I)ept	h: _	5.0 Ft.		
Stratum Elevation/ Depth (ft.)	Lithology	Soil/Rock Description	Sample Type /Number	Sample Depth	SPT Blows	N-Value	Moisture (%)	Recovery (%)	RQD (%)	Unconf. Comp., Tsf	PID (ppm)	
0.2	0 0	ASPHALT GRAVEL, Gray and Brown, with Sandy Clay, No Odor	SS-1								0.7	
1.1		Fine SAND, Brown, Loose, No Odor									0.7	
1.5		No Recovery]								
				5								
5		BOTTOM OF BORING (5")										
				-								
				-								
				10								
				10_								
				-								
				15								
				13_								
				-								
				20								
				ING M						PLE TYI		
	<u>4</u> D	7012 MacCorkle Ave., SE	HSA - H SFA - So							Spoon S by Tube S		
	ľ	Charleston, WV 25304 Telephone: 304-342-1400		oncrete	Corin		I	RC -	Rock	Core Sa Sample		
		Telephone. 304-342-1400	HA - H				1		Dag	Sampic		

BORING NO.		P43 A7		
PAGE	1	OF	1	

Client :	Huntington Municipal Development Authority P.	Project No.: 0101-18-0317									
Project		Boring Method: Geoprobe									
Location	Huntington, West Virginia	Weather/ Temp.: Cloudy 35°									
Start Da	te: 11-14-18 Field Engineer	er/ Geologist: Andrew Grimmett									
Comple	tion Date: 11-14-18 Driller: AZ	ZONE									
Surface	urface Elevation : Benchmark/Elev. :										
Water I	Level Observations : ∇ Immediate : ∇	At completion/# hours /_									
Station	: Offset : _5' North	Boring Depth: 5.0 Ft.									
Stratum Elevation/ Depth (ft.)		Sample Type Number Sample Depth SPT Blows N-Value Moisture (%) Recovery (%) RQD (%) RQD (%) RQD (%) RQD PID (ppm)									
	Soil/Rock Description SANDY CLAY, with Gravel, Gray, Black, and Brown, Slight Sewer Odor	P. C.									
2.8	Orangeish Brown SANDY CLAY, Medium Stiff, No Odor	SS-1 4.8									
3.7	No Recovery	_									
3.7	No Recovery										
5	BOTTOM OF BORING (5')	3 1									
		10									
		20									
'		BORING METHOD SAMPLE TYPE HSA - Hollow Stem Auger SS - Split Spoon Sample									
	POTESTA 7012 MacCorkle Ave., SE Charleston, WV 25304 Telephone: 304-342-1400	SFA - Solid Flight Auger CC - Concrete Coring MD - Mud Drilling HA - Hand Auger SS - Split Spool Sample ST - Shelby Tube Sample RC - Rock Core Sample BS - Bag Sample									

BORING NO.		P43 A8		
PAGE	1	OF	1	

Client	: _	Huntington Municipal Development Authority	y I	Project No. :	0101	-18-0)317				
Projec	t Na	me: Flint Parcels 43 and 45 Sampling	F	Boring Metho	od: _	Geop	robe				
Locati	on:	Huntington, West Virginia	\	Weather/ Ten	np. :	Clou	ıdy 3	35°			
Start I	Oate	: 11-14-18	Field Enginee	er/ Geologist	: <u>An</u>	drew	Grir	nme	tt		
Compl	letio	Date: 11-14-18	Driller: A	ZONE							
Surfac	e Elo	evation:	Benchmark/E	Clev.:							
Water	Lev	el Observations : $\overline{\lor}$ Immediate :	<u> </u>	At completio	n/# ho	urs <u>/</u>					
Statio	n:	Offse	et:			Bori	ng I	Deptl	h:	15.0 F	t.
Stratum Elevation/ Depth (ft.)	Lithology	Soil/Rock Description		Sample Type /Number	SPT Blows	N-Value	Moisture (%)	Recovery (%)	RQD (%)	Unconf. Comp., Tsf	PID (ppm)
		SANDY CLAY, with Gravel, Brick, and Concrete Frag	ments, No Odor								
		(FILL)		SS-	-						0.4
2.5	$\langle y \rangle$	Orangeish Brown SILTY CLAY , Medium Stiff, No Od No Recovery	lor		-						
3	λ.\	Orangeish Brown SILTY CLAY, Medium Stiff, No Od	lor		5_						
		orangensii biowii ozbii i ozbii i ozbii i ozbii i ozbii ozbi		SS-	-						0.6
9.5	XX			SS-	10_						0.6
		Orangeish Brown SANDY CLAY , Soft, No Odor Sandy Layers at 11.4' to 11.6', 12.8' to 13.1', and 14.6' to	o 14.8'	SS-							0.7
				SS-	15						0.1
15		BOTTOM OF BORING (15')									
					20		ı				
	P	OTESTA 7012 MacCorkl Charleston, WN Telephone: 30	/ 25304	HSA - Holle SFA - Solid CC - Cond MD - Mud	d Flight <i>A</i> crete Cor I Drilling	Auger Auger	S	SS - ST - RC -	Split Shell Rock	Spoon S by Tube S Core Sa Sample	ample Sample
		. 5.5p 60	2.200	HA - Hand					-	-	

BORING NO.		P43 B1		
PAGE	1	OF	1	

	_	Huntington Municipal D me: Flint Parcels 43	•		Project Boring	g Metl	hod:		eopı	robe				
		Huntington, West Vir	ginia		Weath		-	_						
				Field Engine			t:	And	rew	Grir	nme	tt		
Comp	letio	n Date : 11-16-18		Driller: _A	AZONE	Ε								
		evation :	☑ Immediate :	Benchmark/	/Elev. : Z At co		ion/#	hom	rs /					
	ation: Offset: Boring Depth: 5.0 Ft.													
Stratum Elevation/ Depth (ft.)	Lithology				Tyme	Number	Sample Depth	SPT Blows	N-Value	Moisture (%)	covery	RQD (%)	Unconf. Comp., Tsf	PID (ppm)
N E E	Ľ	CANDY OF AN anida Consul	Soil/Rock Description	D 1	Sar	ž Ž	Sar	SP BIC	ż	W %	% & &	% %	Co	PI
		SANDY CLAY, with Gravel Black, No Odor (FILL)	and Brick Fragments, Gra	ay, Brown, and	S	SS-1	_							10.4
2.2		No Recovery					-							
							5							
5		BOTTOM OF BORING (5'	')											
							10_							
						BOD	20_		OP			SANI	LE TY	DE .
	P	OTESTA	7012 MacCork Charleston, WY Telephone: 30	V 25304		ISA - Ho FA - So CC - Co ID - M IA - Ha	ollow S olid Fli oncrete ud Dri	Stem A ght Au Corin lling	uger	S	S - T - C -	Split Shell Rock	Spoon S by Tube S Core Sa Sample	ample Sample

BORING NO.		P43 B2		
PAGE	1	OF	1	

	Huntington Municipal Deme: Flint Parcels 43 a			oject No. oring Metl		0101- <u>G</u>)317 robe				
Location:	Huntington, West Virg	ginia	W	eather/ To	emp.	: _(Clou	ıdy 3	84°			
Start Date	: 11-16-18		Field Engineer	/ Geologis	t:	And	rew	Grir	nme	tt		
Completion	Date: 11-16-18		Driller: AZC	ONE								
Surface Ele Water Leve		Z Immediate :	Benchmark/Ele	ev. : t complet	ion/#	hom	rs /					
Station:		Offse)ept	h: _	5.0 Ft.	
Stratum Elevation/ Depth (ft.) Lithology		Soil/Rock Description		Sample Type /Number	Sample Depth	SPT Blows	N-Value	Moisture (%)	Recovery (%)	RQD (%)	Unconf. Comp., Tsf	PID (ppm)
0.2	ASPHALT SANDY CLAY, with Gravel, and Gray, No Odor (FILL) No Recovery	Concrete, and Brick, Bro	wn, Red, Black,	SS-1	-							9.0
5	BOTTOM OF BORING (5")			5_							
					10							
P	OTESTA	7012 MacCorkle Charleston, WV Telephone: 30	/ 25304	BORI HSA - Ho SFA - So CC - CO MD - M HA - Ha	olid Fli oncrete ud Dri	Stem A ght Au Corin lling	uger	S	S - ST - RC -	Split Shell Rock	PLE TYPE Spoon S by Tube S t Core Sa Sample	ample Sample

BORING NO.		P43 B3		
PAGE	1	OF	1	

Client :	Huntington Municipal Development Authority Pr	Project No.: 0101-18-0317						
		Boring Method : Geoprobe						
Location	: Huntington, West Virginia W	Weather/ Temp.: Sunny 34°						
Start Dat	e: 11-16-18 Field Engineer	er/ Geologist: Andrew Grimmett						
Completi	on Date : 11-16-18 Driller : AZ	ZONE						
Surface F	rrface Elevation : Benchmark/Elev. :							
Water Le	ater Level Observations : Immediate : At completion/# hours /_							
Station:	Offset :	Boring Depth: 5.0 Ft.						
Stratum Elevation/ Depth (ft.) Lithology	Soil/Rock Description	Sample Type Number Sample Depth SPT Blows N-Value Moisture (%) Recovery (%) RQD (%) RQD (%) RQD (%) RQD (%)						
0.2	SANDY CLAY, with Gravel and Brick Fragments, Dark Brown, Gray, Red, and Tan, No Odor (FILL)	SS-1 0.7						
2	No Recovery							
5	BOTTOM OF BORING (5")	10_						
	7012 MacCorkle Ave., SE Charleston, WV 25304 Telephone: 304-342-1400	BORING METHOD HSA - Hollow Stem Auger SFA - Solid Flight Auger CC - Concrete Coring SAMPLE TYPE SS - Split Spoon Sample ST - Shelby Tube Sample RC - Rock Core Sample						
	Telephone: 304-342-1400	MD - Mud Drilling HA - Hand Auger BS - Bag Sample						

BORING NO.		P43 B6		
PAGE	1	OF	1	

Client: Huntington Municipal Development Authority Pr	roject No.: 0101-18-0317
Project Name: Flint Parcels 43 and 45 Sampling Bo	oring Method : Geoprobe
Location: Huntington, West Virginia W	Weather/ Temp.: Overcast 32°
Start Date: 11-13-18 Field Engineer	r/ Geologist: Andrew Kirsch
Completion Date: 11-13-18 Driller: AZ	ZONE
Surface Elevation : Benchmark/El	lev.:
	At completion/# hours $\underline{/}$
Station : Offset :	Boring Depth: 2.0 Ft.
Soil/Rock Description Soil/Rock Description	Sample Type Number Sample Depth SPT Blows N-Value Moisture (%) Recovery (%) RQD (%) Unconf. Unconf. Comp., Tsf
Yellowish Orange SANDY CLAY, with Green Lens Noted at 0.3' to 0.5', Medium Stiff, Moist, No Odor	SS-1 0.0
2 BOTTOM OF BORING (2')	
	5
	15
POTESTA 7012 MacCorkle Ave., SE Charleston, WV 25304 Telephone: 304-342-1400	BORING METHOD HSA - Hollow Stem Auger SFA - Solid Flight Auger CC - Concrete Coring MD - Mud Drilling HA - Hand Auger SAMPLE TYPE SS - Split Spoon Sample ST - Shelby Tube Sample RC - Rock Core Sample BS - Bag Sample

BORING NO.		P43 B7		
PAGE	1	OF	1	

Client :	Huntington Municipal Development Authority Pr	roject No.	; (0101-	18-()317	,			
-		oring Met								
Location :	Huntington, West Virginia W	/eather/ T	emp.	: _	Ove	rcast	: 32°			
Start Date	: <u>11-13-18</u> Field Engineer	/ Geologi	st:	And	rew	Kirs	sch			
Completio	n Date : 11-13-18 Driller : AZ	ONE								
Surface El	urface Elevation : Benchmark/Elev. :									
Water Lev	rel Observations : ✓ Immediate : ✓ A	At complet	tion/#	hou!	rs <u>/</u>					
Station:	Offset :			_ I	Bori	ng I)ept	h: _	5.0 Ft.	
y ::) y		ype					x		JsJ	m)
Stratum Elevation/ Depth (ft.) Lithology		Sample Type /Number	Sample Depth	, s	N-Value	Moisture (%)	Recovery (%)		Unconf. Comp., Tsf	РІD (ррт)
Stra Elev Dep Lith	Soil/Rock Description	Sam /Nur	San Dep	SPT Blows	N-N	Moi (%)	Rec (%)	RQD (%)	Unc	ПЫ
0.5	Loose GRAVEL Light Brown SANDY CLAY, with Asphalt, Soft, Moist, No Odor									
	,		-							
2	Yellowish Orange SANDY CLAY, Medium Stiff, Moist, No Odor,	SS-1	-							0.2
	Asphalt Lens Noted at 3' to 3.1'		-							
1, 1, 1,			_							
4	No Recovery		5							
5	BOTTOM OF BORING (5')									
			-							
			-							
			_							
			10							
			10_							
			-							
			_							
			-							
			-							
			15_							
			-							
			-							
			-							
		non	20	ATE (EXT.	OP			CARC	DE EL PRESE	DE .
4	7012 MacCorkle Ave., SE	HSA - H	ING Notes				SS -	Split	PLE TYI Spoon S	ample
	Charleston, WV 25304 Telephone: 304-342-1400	SFA - S		ght Au	ıger	5	ST -	Shell	by Tube S Core Sa	Sample
	Telephone: 304-342-1400	MD - M HA - H	Iud Dri	lling	0				Sample	
		11/1 - П	anu Al	ıgcı						

BORING NO.		P43 B8		
PAGE	1	OF	1	

Client	: _]	Huntington Municipal Development Authorit	У	Proje	ect No.	: _()101-	18-0	317				
Project	t Na	me: Flint Parcels 43 and 45 Sampling		Borin	ng Met	hod :	G	eopi	robe				
Locatio	on:	Huntington, West Virginia		Weat	ther/ T	emp.	: _	32°					
Start D	D ate	: 11-13-18	Field Engin	eer/ G	eologis	st:	And	rew	Kirs	ch			
Compl	etioi	Date: 11-13-18	Driller:	AZON	Е								
		evation :	Benchmark										
		el Observations : $\overline{igspace}$ Immediate :		✓ At co	omplet	ion/#							
Station	n :	Offse	et:				_ F	3ori	ng D	ept]	h: _	5.0 Ft.	
Stratum Elevation/ Depth (ft.)	Lithology	Soil/Rock Description			Sample Type /Number	Sample Depth	SPT Blows	N-Value	Moisture (%)	Recovery (%)	RQD (%)	Unconf. Comp., Tsf	PID (ppm)
0.5	00	Loose GRAVEL , No Odor Light Gray to White CLAYEY SAND , Loose, Moist, N	Jo Odor										
1 2		Black ASPHALT and Red Brick, Mixed with Light Br CLAY , Medium Stiff, Moist, No Odor Yellowish Orange SANDY CLAY Medium Stiff, Moist Concrete Gravel Present at 2' to 2.3', with Red Brick	own SANDY		SS-1	-							0.0
4		No Recovery				_							
5		BOTTOM OF BORING (5')				5_							
						10							
					BOR	20 ING M	IETH(OD				PLE TYP	
	P	OTESTA 7012 MacCork Charleston, WY Telephone: 30	V 25304	0 1		olid Fli oncrete Iud Dri	ght Au Corin lling	ıger	S	T - RC -	Shell Rock	Spoon S by Tube S Core Sa Sample	Sample

BORING NO.		P43 C1		
PAGE	1	OF	1	

Client	t :	Huntington Municipal Development Authority	Pro	ject No.	: ()101-	18-0	317				
	_	me: Flint Parcels 43 and 45 Sampling		ring Met								
Locat	ion:	Huntington, West Virginia	We	ather/ T	emp.	: _(Clou	dy 3	84°			
Start	Date	: 11-16-18 Field En	gineer/	Geologis	st:	And	rew	Grir	nme	tt		
Comp	oletio	n Date :11-16-18	AZO	NE								
Surfa	ce El	evation: Benchm	ark/Ele	v. :								
Wate	r Lev	rel Observations : $\overline{\Box}$ Immediate :	▼ At	complet	ion/#	hou	rs <u>/</u>					
Statio	on:	Offset :				_ B	Borii	ng D	eptl	h: _	5.0 Ft.	
n,	λ,			Sample Type /Number				0)	y		Γsf	(mo
Stratum Elevation/ Depth (ft.)	Lithology			nple 7	Sample Depth	SPT Blows	N-Value	Moisture (%)	Recovery (%)	Ω _	Unconf. Comp., Tsf	РІО (ррт)
Str. Ele Del	Lit	Soil/Rock Description		San	San Dep	SP Blo	ż	8 ⊗	Rec (%)	RQD (%)	Cor	PI
		SANDY CLAY, with Gravel and Brick Fragments, Gray, Brown, R Black, No Odor (FILL)	ed, and	 	_							
1.5		Gray to Brown SILTY CLAY, Soft, No Odor		SS-1	_							0.7
3	(\(\)\\\	No Recovery			_							
					_							
5		BOTTOM OF BORING (5")			5_							
					_							
					-							
					10_							
					-							
					-							
					1.5							
					15_							
					_							
					-							
					-							
				BOD	20	(Transes	OP			CARA	T To do Se)F
	4	7012 MacCorkle Ave.,	SF	HSA - H	ING Mollow S				SS -		PLE TYPE Spoon S	
	4 D	Charleston, WV 25304		SFA - So		ght Au	ger		T -	Shell	y Tube S Core Sa	Sample
		VILJIA Telephone: 304-342-1		MD - M	Iud Dri	lling	0				Sample	T
				HA - H	anu Au	iger						

BORING NO.		P43 C6		
PAGE	1	OF	1	

Client :	Huntington Municipal Development Authority Pro	oject No.	: 0101-	18-03	17					
		•	hod:	eopro	be					
Location :	Huntington, West Virginia We	eather/ T	emp. : _	Overc	ast 32°					
Start Date	e: 11-13-18 Field Engineer/	Geologi	st: And	rew K	irsch					
Completio	on Date : 11-13-18	ONE								
Surface E	levation : Benchmark/Ele	ev.:								
Water Le	fater Level Observations : \overline{Y} Immediate : \overline{Y} At completion/# hours $\underline{/}$									
Station:	ation : Offset : Boring Depth: 15.0 Ft.									
Stratum Elevation/ Depth (ft.) Lithology	Soil/Rock Description	Sample Type /Number	Sample Depth SPT Blows	N-Value Moisture	(%) Recovery (%)	RQD (%) Unconf. Comp., Tsf	PID (ppm)			
хин н	Yellowish Orange SANDY CLAY, with Gravel and Asphalt Throughout,	N C	SI SH	2 2						
	Loose to Stiff, Moist, No Odor	SS-1	_				0.2			
2.9	No Recovery		1 -							
5	Yellowish Orange SANDY CLAY , Stiff, Moist, No Odor		5_							
		I W								
6.5	Yellowish Orange SILTY CLAY, Soft, Moist, No Odor	SS-2					0.0			
		SS-3	10_				0.0			
X X X X X X X X X X X X X X X X X X X		SS-4	_				0.0			
		SS-5	15				0.0			
15	BOTTOM OF BORING (15')									
			-							
			20							
			ING METH			SAMPLE TY				
	7012 MacCorkle Ave., SE Charleston, WV 25304 Telephone: 304-342-1400	SFA - So CC - C MD - M	follow Stem A olid Flight Au concrete Corin fud Drilling fand Auger	ıger	ST - RC -	Split Spoon S Shelby Tube Rock Core S Bag Sample	Sample			

BORING NO.		P43 C7		
PAGE	1	OF	1	

	_	Huntington Municipal D	•		•	ect No.	_	0101-						
•		me: Flint Parcels 43				ng Met				robe				
		Huntington, West Vir				ther/ T	-	_						
				Field Engine		U	st:	And	rew	Kirs	cn			
Comp	oletio	n Date : 11-13-18		Driller: A	AZON	E								
	urface Elevation : Benchmark/Elev. : Benchmark/Elev. : At completion/# hours /_													
	• –													
Statio	on:		Offs	et:				1	30ri	ng L	ept	n:	5.0 Ft.	
Stratum Elevation/ Depth (ft.)	Lithology		Soil/Rock Description			Sample Type /Number	Sample Depth	SPT Blows	N-Value	Moisture (%)	Recovery (%)	RQD (%)	Unconf. Comp., Tsf	PID (ppm)
	0 0	Light Brown SANDY CLAY	, Soft, Moist, No Odor			1								
2.8		Yellowish Orange CLAYEY Moist, No Odor Brick Lens Noted at 1'	SAND, with Red Brick F	Fragments, Loose,		SS-1	-							0.0
5		BOTTOM OF BORING (5'))				5_							
							10_							
	4PA	ATECTA	7012 MacCork	le Ave., SE		HSA - H	Iollow		uger		S -	Split	Spoon S	ample
	ľ	OTESTA	Charleston, W'Telephone: 30	V 25304)	SFA - S CC - C MD - M HA - H	oncrete Iud Dr	e Corin		F	RC -	Rock	by Tube S Core Sa Sample	

BORING NO.		P43 C8		
PAGE	1	OF	1	

Client	:	Huntington Municipal Development Authority	Proj	ect No.	: ()101-	<u>1</u> 8-0	<u>3</u> 17				
		me: Flint Parcels 43 and 45 Sampling	Bori	ing Met	hod:	G	eopi	robe				
Locat	ion :	Huntington, West Virginia	Wea	ther/ T	emp.	:	Snov	v 32	0			
Start	Date	: <u>11-13-18</u> Field Engin	eer/ (Geologis	st:	And	rew	Kirs	ch			
Comp	letio	n Date : 11-13-18 Driller :	AZON	NE								
Surfa	ce El	evation: Benchmark	/Elev	.:								
Water	r Lev	el Observations : $\overline{\lor}$ Immediate :	Z At o	complet	tion/#	hou	rs <u>/</u>					
Statio	n:	Offset :				I	3ori	ng D	eptl	1:	15.0 F	t
Stratum Elevation/ Depth (ft.)	Lithology	Soil/Rock Description		Sample Type /Number	Sample Depth	SPT Blows	N-Value	Moisture (%)	Recovery (%)	Ю) %)	Unconf. Comp., Tsf	PID (ppm)
2 ш п	7.7.1	Light Brown SANDY CLAY, Soft, Moist, No Odor		<u> </u>	0.1	<u>м</u> н	Z	<u> </u>	Y			
	() ()			SS-1	-							0.0
1.4	<u> </u>	Red BRICK Fragments Light Grqy to White CLAYEY SAND, (Concrete), Loose, Dry, Slight		/\								
1.8	1 .\.	Odor No Recovery		L	1							
2.5												
					5							
5	///	Light Grqy to White CLAYEY SAND, Loose, Dry, Slight Odor										
	\ ; \; \; \ \ ; \; \; \;			SS-2	-							0.0
				/\	\ -							
7.5	///	Yellowish Orange to Red SANDY CLAY, Medium Stiff, Moist, No Odd	or		1 -							
	/:/:/			SS-3								0.0
	7. / . /			/ \	10_							
10	///	Yellowish Orange SANDY CLAY , Soft, Moist, No Odor Gray Mottling Noted										
	/://			SS-4								0.0
					-							
	///			\/	-							
				SS-5	-							
15	/:/:	BOTTOM OF BORING (15')			15_							
13		DOLLOW OF DOWN (12)										
					-							
					-							
				D/D	20 ING M	TETEL	OD			SA NAT	LE TYI	DE .
	4	7012 MacCorkle Ave., SE		HSA - H	ollow S	Stem A	uger		SS -	Split	Spoon S	ample
	P	Charleston, WV 25304		SFA - So	oncrete	Corin		F	RC -	Rock	by Tube S Core Sa	
		Telephone: 304-342-140	0	MD - M HA - H				E	3S -	Bag	Sample	

BORING NO.		P43 D1		
PAGE	1	OF	1	

Client	t :	Huntington Municipal Development Authority Pr	roject No.	: 0	0101-	18-0)317				
Proje	_		oring Metl								
Locat			Veather/ Te	emp.	: _(Clou	ıdy 3	34°			
Start	Date	: 11-16-18 Field Engineer	r/ Geologis	t:	And	rew	Grii	nme	tt		
Comp	letio	n Date : 11-16-18 Driller : AZ	ZONE								
Surfa	urface Elevation : Benchmark/Elev. :										
Wate	r Lev	el Observations : \overline{Y} Immediate : \overline{Y} A	At completi	ion/#	hou	rs <u>/</u>					
Statio	on:	Offset :			_ E	Bori	ng I)ept	h: _	5.0 Ft.	
, j.	>		ype					×		Js.	m)
Stratum Elevation/ Depth (ft.)	Lithology		Sample Type /Number	iple th	. sw	N-Value	Moisture (%)	Recovery (%)		Unconf. Comp., Tsf	РІD (ррт)
Stra Elev Dep	Lith	Soil/Rock Description	Sam /Nur	Sample Depth	SPT Blows	N-N	Moi (%)	Rec (%)	RQD (%)	Con	PII
		SANDY CLAY, Dark Brown with Gray and Black Gravel, No Odor (FILL)	\/								
			SS-1	+							9.6
1.7	$\langle \chi \rangle \langle \chi \rangle$	Gray to Orangeish Brown SILTY CLAY, Medium Stiff, No Odor	33-1	4							9.0
	KKK										
3		No Recovery									
5		BOTTOM OF BORING (5")		5							
				-							
				1							
				+							
				-							
				10_							
				-							
				-							
				15_							
				-							
				+							
				-							
				20_							
	4-	7012 MacCarlda Ava CE	HSA - Ho	ING M						PLE TYI Spoon S	
	4 D	7012 MacCorkle Ave., SE Charleston, WV 25304 Telephone: 304-342-1400	SFA - So	olid Flig	ght Au	ger	5	ST -	Shell	by Tube	Sample
		Telephone: 304-342-1400	MD - M		lling	g				c Core Sa Sample	ширіе
		, , , , , , , , , , , , , , , , , , , ,	HA - Ha	and Au	ger						

BORING NO.		P43 D3		
PAGE	1	OF	1	

Client	t :	Huntington Municipal Development	Authority	Project No	0.:	0101-	18-0	317				
Proje	ct Na	me: Flint Parcels 43 and 45 San	pling	Boring M	ethod	: <u>G</u>	eopr	robe				
Locat	ion :	Huntington, West Virginia		Weather/	Temp	.: _	Sunn	ıy 35	5°			
Start	Date	: 11-14-18	Field Engine	eer/ Geolog	gist :	And	rew	Grir	nme	tt		
Comp	letio	n Date: 11-14-18	Driller :	AZONE								
Surfa	ce El	evation :	Benchmark	Elev. :								
Wate	Vater Level Observations : ✓ Immediate : ✓ At completion/# hours /_											
Statio	Station : Offset : Boring Depth: 5.0 Ft.											
Stratum Elevation/ Depth (ft.)	Lithology	Soil/Rock Do	escription	Sample Type /Number	Sample Denth	SPT Blows	N-Value	Moisture (%)	Recovery (%)	RQD (%)	Unconf. Comp., Tsf	PID (ppm)
		Loose GRAVEL , Black, Brown, and Red v (FILL)	vith SANDY CLAY , No Odo			-						0.1
2.3	(/ /	Yellowish Brown SANDY CLAY, Medium	Stiff, No Odor									
2.9		No Recovery				1						
						-						
5		BOTTOM OF BORING (5')			5							
					10_							
	4-		O		RING			C			PLE TYI	
	P	Charles	acCorkle Ave., SE ton, WV 25304 one: 304-342-1400	SFA - CC - MD -	Hollow Solid F Concre Mud D Hand A	light Au te Corin rilling	ger	S	ST - RC -	Shell Rock	Spoon S by Tube S Core Sa Sample	Sample

BORING NO).	P43 D	4
PAGE	1	OF	1

Client: Huntington Municipal Developmen	t Authority Pro	oject No.: 0	101-18-0)317		
Project Name: Flint Parcels 43 and 45 San	<u> </u>	ring Method :				
Location: Huntington, West Virginia	We	eather/ Temp.	: Sun	ny 35°		
Start Date: _11-14-18	Field Engineer/	Geologist :	Andrew	Grimme	ett	
Completion Date: 11-14-18	Driller :AZC	ONE				
Surface Elevation : $\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $		ev.: t completion/#	hours /			
Station:	Offset :		_ Bori	ng Dept	h: 5.0 Ft	•
Stratum Elevation/ Depth (ft.) Lithology Dysoulties	_	Sample Type //Number Sample Depth	SPT Blows N-Value	Moisture (%) Recovery (%)	RQD (%) Unconf. Comp., Tsf	PID (ppm)
Loose GRAVEL , Gray, Red, and Brown, S	Sewage Odor	SS-1				1.8
1.2 No Recovery		5				
5 BOTTOM OF BORING (5')		10_				
P() F\ Δ Charles	facCorkle Ave., SE ston, WV 25304 one: 304-342-1400	BORING M HSA - Hollow S SFA - Solid Flig CC - Concrete MD - Mud Dril HA - Hand Au	Stem Auger ght Auger Coring lling	SS ST RC	SAMPLE TY - Split Spoon S - Shelby Tube - Rock Core S - Bag Sample	Sample Sample

BORING NO.		P43 D5		
PAGE	1	OF	1	

	_	Huntington Municipal D me: Flint Parcels 43	*		•	ect No. ng Met	_	0101-)317 robe				
•		Huntington, West Vir		_		her/ T								
		11 11 10		Field Engine			_	_				tt		
Comp	letio	n Date : 11-14-18		_	AZON.	_								
		evation :		Benchmark/	Ælev.	:								
		rel Observations :	☑ Immediate :		At co	omplet	tion/#							
Statio	on:		Offse	et:				_ I	3ori	ng D)ept	h:	5.0 Ft.	
Stratum Elevation/ Depth (ft.)	Lithology		Soil/Rock Description			Sample Type /Number	Sample Depth	SPT Blows	N-Value	Moisture (%)	Recovery (%)	RQD (%)	Unconf. Comp., Tsf	PID (ppm)
		Loose GRAVEL , Gray, Red, (FILL)	and Brown, with Sandy C	Clay, No Odor		SS-1	-	_						1.0
2	(././	Orangish Brown SANDY CL	AY, Meidum Stiff, No Oo	dor			_	1						
2.5		No Recovery					-	-						
5		BOTTOM OF BORING (5'	•				5_							
							10_							
								лет н				_	PLE TYP	
	P	OTESTA	7012 MacCork Charleston, W Telephone: 30	V 25304) S	HSA - H SFA - S CC - C MD - M HA - H	olid Fl oncret Iud Dr	ight Au e Corin illing	ıger	S	T - RC -	Shell Rock	Spoon Say Tube Say Core Say Sample	Sample

BORING NO.		P43 D6		
PAGE	1	OF	1	

	Juntington Municipal De	-	-	•	ect No.		0101-						
•	re: Flint Parcels 43 a	• •			ng Met				robe				
	Huntington, West Virg		Field Engine		her/ T	-							
	Date: 11-13-18		_	AZON.	_	si :	Allu	iew	KIIS	CII			
Completion	<u> </u>		Dilliei. <u>F</u>	AZON.	Ľ								
Surface Ele		7	Benchmark/			,							
	l Observations : $\sqrt{}$	Immediate:		- At co	omplet	ion/#				. 41		7 O E	
Station:		Offse	et:					sori	ng L)ept	n: _	5.0 Ft.	
Stratum Elevation/ Depth (ft.) Lithology		Soil/Rock Description			Sample Type /Number	Sample Depth	SPT Blows	N-Value	Moisture (%)	Recovery (%)	RQD (%)	Unconf. Comp., Tsf	PID (ppm)
(/./.)	Light Brown SANDY CLAY,	with Gravel, Medium St	iff, Moist, No Odo	or									
1.1	CONCRETE				\	=							
1.5	Yellowish Orange SANDY CI Odor	AY with Gray Streaks, \$	Stiff, Moist, No		SS-1	-							0.2
4	No Recovery					5							
5	BOTTOM OF BORING (5')					3_							
						10							
P	OTESTA	7012 MacCork Charleston, WV Telephone: 30	V 25304) S	BOR HSA - H BFA - So CC - C MD - M HA - H	ollow S olid Fli oncrete Iud Dri	ght Au Corin lling	uger	S	S - ST - RC -	Split Shell Rock	PLE TYPE Spoon S by Tube S C Core Sa Sample	ample Sample

BORING NO.		P43 D7		
PAGE	1	OF	1	

Client Proje	_		Project Boring)101- G)317 robe				
•		Huntington, West Virginia	Weath	_				38°				
Start					_	_						
			AZONE	_								
		evation: Benchmark/										
			At co	mple	tion/#						10.0 5	
Statio	on:	Offset :				t	30ri	ng I	e pt	h:	10.0 F	t
Stratum Elevation/ Depth (ft.)	Lithology	Soil/Rock Description	Sample Tyne	/Number	Sample Depth	SPT Blows	N-Value	Moisture (%)	Recovery (%)	RQD (%)	Unconf. Comp., Tsf	PID (ppm)
	/:/:/	Light Brown SANDY CLAY, Soft, Moist, No Odor		1								
0.7		Red BRICK Fragments, Loose, Moist, No Odor	s	SS-1	-							0.0
1.3		White to Light Gray SAND, (Concrete), Loose, Dry, Slight Odor		/	\setminus							
2.3		No Recovery		L	1							
5	\.\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Pale Yellowish Orange SANDY SILT , Loose, Dry, Sewage Odog		Г	5_							
				SS-2	- 10							0.0
10		BOTTOM OF BORING (10')										
					15							
		704014 0 11 4 07	п		ING Mollow S						PLE TYI Spoon S	
	P	OTESTA 7012 MacCorkle Ave., SE Charleston, WV 25304 Telephone: 304-342-1400	SI C M	FA - S C - C ID - M	olid Fli olid Fli oncrete Iud Dri Iand Au	ght Au Corin lling	ıger	S	ST -	Shell Rock	by Tube S Core Sa Sample	Sample

BORING NO.		P43 D8		
PAGE	1	OF	1	

Client	t: _	Huntington Municipal Development Authority Pro	oject No.	: 0	101-	18-0)317	,			
Proje	ct Na	me: Flint Parcels 43 and 45 Sampling Bo	ring Met	hod:	G	eop	robe	;			
Locat	ion :	Huntington, West Virginia We	eather/ T	emp.	: _	Snov	w 32	0			
Start	Date	: <u>11-13-18</u> Field Engineer/	Geologi	st:	And	rew	Kirs	sch			
Comp	letio	n Date: 11-13-18 Driller: AZC	ONE								
Surfa	ce El	evation: Benchmark/Ele	ev.:								
Wate	r Lev	el Observations : \overline{Y} Immediate : \overline{Y} At	t complet	tion/#	hou	rs <u>/</u>					
Statio	on:	Offset :			_ E	Bori	ng I	Dept	h:	10.0 F	t
Stratum Elevation/ Depth (ft.)	Lithology		Sample Type /Number	Sample Depth	SPT Blows	N-Value	oisture)	covery)	RQD (%)	Unconf. Comp., Tsf	РШ (ррт)
2 <u>2</u> 2	Ē	Soil/Rock Description	Sa	Sa	S in	Ż	ĭ%	% %	\ 8	50	P
0.0		Light Brown CLAYEY SAND, Loose, Moist, No Odor	_ \ \.	1							
0.8		Red BRICK	SS-1								0.0
2	7.7.7	Light Gray to White SANDY CLAY (Concrete), Loose, Slight Odor		1							
2.5		No Recovery		_							
5	7.7.1	Light Gray to White SANDY CLAY, Loose, Slight Odor		5_							
5.7	////	Yellowish Orange SANDY CLAY, Medium Stiff, Moist, No Odor	SS-2	1 -							0.0
			33-2								0.0
7.7	<u> </u>	Reddish SANDY CLAY, Stiff, Moist, No Odor	_								
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	SS-3								0.0
9.5) :	Yellowish Orange SANDY CLAY, Soft, Moist, No Odor	-	1.0							
		BOTTOM OF BORING 10'	1	10							
10											
				-							
				-							
				15_							
				-							
			BOR	20 LING M	ЕТН	OD			SAMI	PLE TYI	PE_
	45	7012 MacCorkle Ave., SE	HSA - H SFA - S							Spoon S by Tube	
	ľ	Charleston, WV 25304 Telephone: 304-342-1400		oncrete Ind Dril	Corin ling		I	RC -	- Rock	k Core Sa Sample	

BORING NO.		P43 E1		
PAGE	1	OF	1	

Clien	t: _	Huntington Municipal De	evelopment Authorit	y P 1	roject No.	: ()101-	18-0	317				
Proje	ct Na	me: Flint Parcels 43 a	and 45 Sampling	В	oring Met	hod:	G	eopr	obe				
Locat	ion:	Huntington, West Virg	ginia	W	eather/ T	emp.	: _(Clou	dy 3	4°_			
Start	Date	: 11-16-18		Field Engineer	/ Geologis	st:	Andı	rew (Grin	nme	tt		
Comp	oletio	n Date : 11-16-18		Driller: AZ	ONE								
Surfa	ce El	evation:		Benchmark/El	ev.:								
Wate	r Lev	el Observations : $\sqrt{2}$	Z Immediate :	▼ A	t complet	tion/#	houi	rs <u>/</u>					
Stati	on:		Offse	et:			_ B	orin	ng D	eptl	h: _	5.0 Ft.	
Stratum Elevation/ Depth (ft.)	Lithology		Soil/Rock Description		Sample Type /Number	Sample Depth	SPT Blows	N-Value	Moisture (%)	Recovery (%)	RQD (%)	Unconf. Comp., Tsf	PID (ppm)
		SANDY CLAY, with Gravel No Odor (FILL)	and Brick Fragments, Gra	y to Dark Brown,	SS-1	_							0.8
1.5	$\langle \zeta \rangle$	Grayish Brown SILTY CLAY	Y, Soft, No Odor			1							
2		No Recovery				_							
5		BOTTOM OF BORING (5")			5							
						10_							
							IETH(PLE TYI	
	P	OTESTA	7012 MacCorkl Charleston, W\ Telephone: 30	/ 25304	HSA - H SFA - So CC - C MD - M HA - H	olid Fli oncrete Iud Dri	ght Au Corin lling	ger	S R	T - RC -	Shell Rock	Spoon S by Tube S Core Sa Sample	Sample

BORING NO.		P43 E3		
PAGE	1	OF	1	

Client	:	Huntington Municipal D	evelopment Authorit	ty	Proj	ect No.	: ()101-	18-0	317				
	_	me: Flint Parcels 43	-		•	ng Met		G	eopi	robe				
Locati	ion :	Huntington, West Vir	ginia		Wea	ther/ T	emp.	: _	Sunr	ıy 35	5°			
Start 1	Date	: 11-14-18		Field Engin	eer/ G	Geologis	st:	And	rew	Grir	nme	tt		
Comp	letio	n Date : 11-14-18		Driller:	AZON	NE								
Surfac	ce El	evation :		Benchmark	/Elev.	.:								
Water	Lev	el Observations:	☑ Immediate :	<u> </u>	Z At c	complet	ion/#	hou	rs <u>/</u>					
Statio	n:		Offs	et :				_ F	Bori	ng D)eptl	h: _	5.0 Ft.	
Stratum Elevation/ Depth (ft.)	Lithology		Soil/Rock Description			Sample Type /Number	Sample Depth	SPT Blows	N-Value	Moisture (%)	Recovery (%)	RQD (%)	Unconf. Comp., Tsf	PID (ppm)
(Loose GRAVEL , Red, Black Sewage Odor (FILL)	x, and Brown, with Glass F	Pieces, Slight		SS-1	_							16.2
1.5		Grayish Brown SANDY CLA	Y, Medium Stiff, No Od	or		55-1	_							10.2
2.5		No Recovery					_							
							5							
5		BOTTOM OF BORING (5)				_							
							_							
							_							
							10							
							10_							
							_							
							_							
							-							
							15_							
							_							
							_							
							_							
						BOR	20 ING N		OD			SAMI	LE TYI	PE
	P	OTESTA	7012 MacCork Charleston, W' Telephone: 30	V 25304	0	HSA - H SFA - So	ollow S olid Fli oncrete Iud Dri	Stem A ght Au Corin lling	uger	S	S - ST - RC -	Split Shell Rock	Spoon S by Tube S Core Sa Sample	ample Sample

BORING NO.		P43 E4		
PAGE	1	OF	1	

Clien	t: _	Huntington Municipal Development Authority F	Project No.	: 0101	-18-03	317			
Proje	ct Na	me: Flint Parcels 43 and 45 Sampling	Boring Met	hod:	Geopro	obe			
Locat	ion:	Huntington, West Virginia	Weather/ T	emp. :	Sunny	y 35°			
Start	Date	: <u>11-14-18</u> Field Enginee	er/ Geologis	s t : An	drew (Grimme	tt		
Comp	oletio	n Date: 11-14-18 Driller: A2	ZONE						
Surfa	ce El	evation : Benchmark/E	Elev. :						
Wate	r Lev	rel Observations : ∇ Immediate : ∇	At complet	ion/# ho	urs <u>/</u>				
Stati	on:	Offset :			Borin	g Dept	h: _1	15.0 Ft	•
` c ∵	^		ype					Jst	m)
tum atior th (ft	Lithology		Sample Type /Number	th	N-Value	(%) Recovery (%)		onf. ıp., T	РІD (ррт)
Stratum Elevation/ Depth (ft.)	Lith	Soil/Rock Description	Sam	Sample Depth SPT	N-N	% Rec % S	RQD (%)	Unconf. Comp., Tsf	PIL
		Loose GRAVEL , Gray and Brown with Glass and Sandy Clay, Slight Sewage Odor (FILL)	1/						
		Sewage Odol (FIEE)	SS-1	-					0.4
2		O 'I D GANTNY OF ANY M 'I CO'CC NI OI							
2	./. //	Orangeish Brown SANDY CLAY , Meidum Stiff, No Odor No Recovery							
2.4									
				-					
		CHIEN CHAN WILL GIRE VI OI		5_					
5	<i> </i>	Orangeish Brown SILTY CLAY, Meidum Stiff, No Odor							
	[\\\]		SS-2	-					0.0
	[\\\]		/\	-					
	{ <i>XX</i>]								
	8,5,5,8		SS-3						0.2
	8 8 8 8			-					0.2
10	<i>3 X) X</i>	No Recovery		10_					
		•							
				-					
				15					
15		BOTTOM OF BORING (15')							
				-					
				-					
			вОр	20 ING MET	HOD		SAMDI	LE TYP	TF.
	4	7012 MacCorkle Ave., SE	HSA - H	ollow Stem	Auger	SS -	Split S	Spoon Sa	mple
	4 P	Charleston, WV 25304 Telephone: 304-342-1400		olid Flight A oncrete Cor				/ Tube S Core Sai	
		Telephone: 304-342-1400	MD - M	lud Drilling	-0		Bag S		г
			HA - H	and Auger		- 1			

BORING NO.		P43 E5		
PAGE	1	OF	1	

Projec	et Na	Huntington Municipal Development me: Flint Parcels 43 and 45 Sam	pling	Project No. Boring Met	thod:		eopr	robe				
		11 14 10		Weather/ T	-	_						
		: <u>11-14-18</u> n Date : 11-14-18		eer/ Geologi AZONE	st:	Ana	rew	Grir	nme	tt		
Сошр	ieno	11-14-10	Dimei	AZONE								
		evation:	Benchmark									
		el Observations : $\overline{\vee}$ Immedia		At comple	tion/#		_	_				
Statio	n:		Offset :				Borii	ng L	ept	h: _	4.2 Ft.	
Stratum Elevation/ Depth (ft.)	Lithology	Soil/Rock De	scription	Sample Type /Number	Sample Depth	SPT Blows	N-Value	Moisture (%)	Recovery (%)	RQD (%)	Unconf. Comp., Tsf	PID (ppm)
		Loose GRAVEL , Brown, Black, and Tan, v (FILL)	vith Sandy Clay, No Odor	SS-1	_							0.0
2.3		Orangish Brown SANDY CLAY , Medium	Stiff, No Odor	SS-2	_							0.0
4.2		BOTTOM OF BORING (4.2')			5							
	P	Charles	acCorkle Ave., SE ton, WV 25304 one: 304-342-140	HSA - H SFA - S CC - C	ING M Iollow S olid Fli Concrete Iud Dri	Stem A ght Au Corin lling	uger ger	S	S - T - RC -	Split Shell Rock	Spoon S by Tube S Core Sa Sample	ample Sample

BORING NO.		P43 E6		
PAGE	1	OF	1	

Client	:	Huntington Municipal Development Authority Pr	oject No	.: 0	101-	18-()317	,			
Projec	t Na	me: Flint Parcels 43 and 45 Sampling Bo	oring Me	thod:	G	eop	robe	;			
Locati	on:	Huntington, West Virginia W	eather/ T	Гетр.	: _(Ove	rcast	t 32°			
Start I	Oate	: <u>11-13-18</u> Field Engineer	/ Geologi	ist:	And	rew	Kirs	sch			
Compl	letio	Driller: AZC	ONE								
Surfac	e Ele	evation : Benchmark/Elo	ev.:								
Water	ater Level Observations : $\sqrt{}$ Immediate : $\sqrt{}$ At completion/# hours $/$										
Statio	n:	Offset :			_ F	Bori	ng I)ept	h:	15.0 F	t
in/ t.)	S ₂		Sample Type /Number			4)	a)	y		Tsf	(mc
Stratum Elevation/ Depth (ft.)	Lithology		nple 7	Sample Depth	SPT Blows	N-Value	Moisture (%)	Recovery (%)	Q o	Unconf. Comp., Tsf	РІD (ррт)
Del Ber	Lit	Soil/Rock Description	San	San Dej	SP Blo	-N	W %	8e (%	RQD (%)	Con	PI
	()()	Yellowish Orange SANDY CLAY, with Some Light Gray Mottling, Medium Stiff, Moist, No Odor									
[N			SS-1	XI 1							0.1
2	1.1.1	Light Gray SANDY CLAY, Medium Stiff, Moist, No Odor	_ /	$\backslash \backslash $							
- '		Eight Gray Militar Chill, Mediani Buni, Moisi, No Gaoi		1]							
3.4	777	Yellowish Orange SILTY CLAY, Stiff, Moist, No Odor	SS-2	$\parallel \parallel$							0.1
			35-2	\mathbb{A}							0.1
5	X, X	Yellowish Orange SILTY CLAY, Stiff, Moist, No Odor, Some Gray		5_							
	XX	Mottling Noted									
(_ 1							
(1	4 -							
K			SS-4	\mathbb{V}							0.0
K	//X		SS-3	10							0.1
10	(//	Yellowish Orange SANDY CLAY, Soft, Moist, No Odor									
1			SS-5	VI -							0.1
	////			\mathbb{I}							0.1
	() (1							
	() ()			$\sqrt{}$							
	/./.		SS-6	\mathbb{A}							0.1
15	/ / /	POTTOM OF PODING (15)		15							
15		BOTTOM OF BORING (15')									
				-							
			BOI	20 RING M	ЕТН	OD			SAMI	PLE TYI	PE
	4	7012 MacCorkle Ave., SE	HSA - I SFA - S							Spoon S by Tube S	
	r	Charleston, WV 25304 Telephone: 304-342-1400	CC - C	Concrete	Corin	_	I	RC -	Rock	Core Sa	
		Telephone: 304-342-1400	MD - MHA - I				I	3S -	Bag	Sample	

BORING NO.		P43 E7		
PAGE	1	OF	1	

Client :	Huntington Municipal Development Authority Pro	oject No. :	: 0101-	18-03	17					
Project Na	me: Flint Parcels 43 and 45 Sampling Bot	ring Meth	od: C	eopro	be					
Location :	Huntington, West Virginia We	eather/ Te	emp. : _	Overca	ast 32°					
Start Date	: <u>11-13-18</u> Field Engineer/	Geologis	t: And	lrew K	irsch					
Completio	n Date: 11-13-18 Driller: AZC	ONE								
Surface El	evation: Benchmark/Ele	ev.:								
Water Lev	Vater Level Observations : ✓ Immediate : ✓ At completion/# hours /_									
Station:	Offset :]	Boring	g Dept	h: <u>10</u>	0 Ft.			
Stratum Elevation/ Depth (ft.) Lithology	Soil/Rock Description	Sample Type /Number	Sample Depth SPT Blows	N-Value Moisture	(%) Recovery (%)	RQD (%) Unconf.	Comp., Tsf PID (ppm)			
хшп п	Light Brown SANDY CLAY, Soft, Moist, No Odor	N C	NI NH	2 2		R () 1				
0.5	Light Gray to White SAND, Loose, Dry, Sewage Odor	SS-1					2.0			
2.4	No Recovery		5							
5	Yellowish Orange SILTY CLAY, with Red Tint, Soft, Moist, No Odor	SS-2 SS-3	10				0.0			
10	BOTTOM OF BORING (10')	BORI	15	OD		SAMPLE	TYPE			
P	7012 MacCorkle Ave., SE Charleston, WV 25304 Telephone: 304-342-1400	HSA - Ho SFA - So CC - Co	ollow Stem A lid Flight Au oncrete Corin ud Drilling	Auger iger	SS - ST - RC -	Split Spc	on Sample ube Sample re Sample			

BORING NO.		P43 E8		
PAGE	1	OF	1	

Proje Locat Start Comp Surfa Wate	Client: Huntington Municipal Development Authority Project No.: 0101-18-0317 Project Name: Flint Parcels 43 and 45 Sampling Boring Method: Geoprobe Location: Huntington, West Virginia Weather/ Temp.: Snow 32° Start Date: 11-13-18 Field Engineer/ Geologist: Andrew Kirsch Completion Date: 11-13-18 Driller: AZONE Surface Elevation: Water Level Observations: Station: Offset: Boring Depth: 15.0 Ft.									
Stratum Elevation/ Depth (ft.)	Lithology	Soil/Rock Description	Sample Type /Number	Sample Depth SPT Blows	N-Value Moisture	(%) Recovery (%)	RQD (%)	Unconf. Comp., Tsf	PID (ppm)	
0.5		Loose GRAVEL , No Odor Yellowish Orange SILTY CLAY , Medium Stiff, Moist, No Odor	SS-1	_					0.2	
3.8		Yellowish Orange SANDY CLAY, Medium Stiff, Moist, No Odor	SS-2	5_					0.0	
6		Yellowish Orange, with Gray Mottling SANDY CLAY, Medium Stiff, Moist, No Odor Yellowish Orange SANDY CLAY, Soft, Moist, No Odor	SS-3						0.0	
			SS-4	10_					0.0	
			SS-5						0.1	
13.5		Yellowish Orange CLAYEY SAND, Soft, Moist, No Odor BOTTOM OF BORING (15')	SS-6	15					0.1	
13		DOLLOW OF DOKING (13)		20						
	P	OTESTA 7012 MacCorkle Ave., SE Charleston, WV 25304 Telephone: 304-342-1400	HSA - H SFA - S CC - C MD - M HA - H	ING METH Iollow Stem A olid Flight Au Concrete Corin Iud Drilling Iand Auger Lock Coring	Auger iger	SS - ST - RC -	- Split - Shel - Rocl	PLE TYI Spoon S by Tube S & Core Sa Sample	ample Sample	

BORING NO.		P43 F1		
PAGE	1	OF	1	

		evelopment Authority		ject No.		0101-						
•	Flint Parcels 43	• •		ing Met			eopi					
	Huntington, West Vir	T: 11 E	vvea Engineer/ (ather/ T	_	_		_		++		
Completio		Field F Driller	_	_	si :	Allu	iew	GH	Ше	ιι		
Completic	<u> 11-10-18</u>	Dilliei	· AZO	INL								
Surface E			mark/Elev —									
	vel Observations :	☐ Immediate :	▼ At	complet	ion/#		_		. 41		5 O E	
Station :		Offset :		T .	1		Bori	ng L	ept	n: _	5.0 Ft.	
Stratum Elevation/ Depth (ft.) Lithology		Soil/Rock Description		Sample Type /Number	Sample Depth	SPT Blows	N-Value	Moisture (%)	Recovery (%)	RQD (%)	Unconf. Comp., Tsf	PID (ppm)
0.5	GRAVEL SANDY CLAY, with Gravel	, Brick Fragments and Glass, No Ode	or (FILL)	SS-1	-							6.3
2	Odor	Brown SILTY CLAY , Meidum Stif	f, No	33-1	_							0.3
3.5	No Recovery				-							
5	BOTTOM OF BORING (5"	')			5_							
					10_							
						METH(_	PLE TYPE	
	POTESTA	7012 MacCorkle Ave. Charleston, WV 2530 Telephone: 304-342-	4	HSA - H SFA - So CC - C MD - M HA - H	olid Fli oncrete Iud Dri	ght Au Corin Iling	ıger	S R	T - RC -	Shell Rock	Spoon S by Tube S Core Sa Sample	Sample

BORING NO).	P43 F2	2
PAGE	1	OF	1

Client :	Huntington Municipal Development Author	ority Pro	Project No.: 0101-18-0317									
Project N	ame: Flint Parcels 43 and 45 Sampling	Bor	ing Metl	hod:	G	Geoprobe						
Location	: Huntington, West Virginia	Wes	ather/ To	emp.	: _(Clou	ıdy 3	35°				
Start Dat	e: 11-14-18	Field Engineer/	Geologis	t:	And	rew	Grir	nme	tt			
Completi	on Date : 11-14-18	Driller: AZO	NE									
Surface E	Clevation :	Benchmark/Elev	y .:									
Water Le	vel Observations : $\overline{\lor}$ Immediate :		complet	ion/#	hou	rs <u>/</u>						
Station:	Of	ffset :			_ F	Bori	ng D	Deptl	h: _	15.0 F	t	
Stratum Elevation/ Depth (ft.) Lithology	Soil/Rock Description		Sample Type /Number	Sample Depth	SPT Blows	N-Value	foisture %)	Recovery (%)	(QD %)	Unconf. Comp., Tsf	РГО (ррт)	
NET 1	Loose GRAVEL , Gray, Brown, and Black, with Sar		s e	S	ВВ	Z	25	2 5	<u>≈</u> છ	20		
1.8	Light Sewer Odor (FILL) Light Brown SANDY CLAY, Medium Stiff, No Od		SS-1	-							4.7	
2.4	No Recovery		4									
5	Orangeish Brown SANDY CLAY , Medium Stiff, N	o Odor		5_								
	Orangersh Brown 6747 D1 CE111, medium Burn, 13	0 0401	SS-2	_							0.3	
			SS-3	10_							0.2	
11	Orangeish Brown SANDY CLAY, Soft, No Odor Sandy Layers at 12.7' to 12.8', 13.3' to 13.8', and 14	.5' to 15'	SS-4	- -							0.3	
			SS-5	15							0.5	
15	BOTTOM OF BORING (15')			15								
				20								
				ING M						PLE TYI		
	POTESTA 7012 MacCo Charleston, V Telephone: 3		HSA - Ho SFA - So CC - Co MD - M HA - Ha RC - Ro	olid Flig oncrete ud Dril and Au	ght Au Corin lling ger	ıger	S	ST - RC -	Shell Rock	Spoon S by Tube S Core Sa Sample	Sample	

BORING NO.		P43 F3		
PAGE	1	OF	1	

Client :	Huntington Municipal Development Authority Pr	oject No.	: ()101-	18-0	317				
_		Goring Method : Geoprobe								
Location :		eather/ T	emp.	: -	Sunr	ıy 3.	5°			
Start Date	: 11-14-18 Field Engineer/	Geologis	st:	And	rew	Grir	nme	tt		
Completio	n Date: 11-14-18 Driller: AZC	ONE								
Surface El	evation: Benchmark/Ele	ev.:								
Water Lev	rel Observations : ∇ Immediate : ∇ A	t complet	ion/#	hou	rs <u>/</u>					
Station:	Offset :			_	Bori	ng I	eptl	h:	5.0 Ft.	
Stratum Elevation/ Depth (ft.) Lithology	Soil/Rock Description	Sample Type /Number	Sample Depth	SPT Blows	N-Value	Moisture (%)	Recovery (%)	RQD (%)	Unconf. Comp., Tsf	PID (ppm)
	Loose GRAVEL , Tan, Gray, Black, and Brown, with Glass and Sandy Clay, Slight Sewage Odor (FILL)	SS-1	_							0.3
1.8	Light Brown SANDY CLAY, Medium Stiff, No Odor	\dashv \wedge	_							
2.4	No Recovery		- 5							
5	BOTTOM OF BORING (5')		10							
P	7012 MacCorkle Ave., SE Charleston, WV 25304 Telephone: 304-342-1400	HSA - Ho SFA - So	ollow S olid Fli oncrete and Dri	ght Au Corin lling	uger	S	S - ST - RC -	Split Shell Rock	Spoon S by Tube S Core Sa Sample	ample Sample

BORING NO.		P43 F4		
PAGE	1	OF	1	

Client	:	Huntington Municipal Development Authority 1	Project N	0.:	0101-	-18-()317					
Projec	_		•	Boring Method: Geoprobe								
Locati	ion :	Huntington, West Virginia	Weather/	Temp	o.: _	Suni	ny 3.	5°				
Start 1	Date	: <u>11-14-18</u> Field Engine	er/ Geolog	gist :	And	lrew	Grii	nme	tt			
Comp	letio	n Date : 11-14-18 Driller : A	ZONE									
Surfac	ce El	evation : Benchmark/F	Elev. :									
Water	Lev	el Observations : Immediate :	At compl	etion	/# hou	rs <u>/</u>						
Statio	n:	Offset :]	Bori	ng I)ept	h: _	5.0 Ft.		
> _			ype							st	n)	
tum ation th (ft	Lithology		Sample Type /Number	ple	s s	N-Value	Moisture (%)	Recovery (%)		onf. ıp., T	PID (ppm)	
Stratum Elevation/ Depth (ft.)	Lith	Soil/Rock Description	Sam /Nun	Sample	SPT Blows	N-N	Mois (%)	Rec (%)	RQD (%)	Unconf. Comp., Tsf	PIE	
		Loose GRAVEL, Gray, Brown, and Black, No Odor (FILL)		M								
			SS-1	X	-						0.3	
1.8	1.7.1	Orangeish Brown SANDY CLAY, Medium Stiff, No Odor		\square	-							
2.2		No Recovery	_									
					1							
5		BOTTOM OF BORING (5')		5	+							
		. ,										
					1							
					+							
					-							
				10								
					+							
					-							
					1							
				15	-							
					-							
					1							
					+							
				20		· O.F.						
		7012 MacCorkle Ave., SE			METH v Stem A					PLE TYI Spoon S		
	(D	Charleston, WV 25304 Telephone: 304-342-1400	SFA -	Solid I	Flight Au ete Corir	ıger	5	ST -	Shell	by Tube a	Sample	
		Telephone: 304-342-1400	MD -	Mud D	rilling	. 8				Sample	шри	
		•	HA -	Hand A	Auger							

BORING NO.		P43 F5						
PAGE	1	OF	1					

Client :	Huntington Municipal Development Authority Pr	roject No. :	: 010)1-18-()317					
		oring Method: Geoprobe								
Location		Veather/ Te				5°				
Start Da		r/ Geologis	t: A	ndrew	Grin	nmett				
Comple	tion Date: 11-14-18 Driller: AZ	ZONE								
Surface	Elevation : Benchmark/El	lev. :								
Water I	Level Observations : \overline{Y} Immediate : \overline{Y} A	At completi	ion/# h	ours <u>/</u>						
Station	: Offset :			Bori	ng D	epth:	5.0 Ft.			
Stratum Elevation/ Depth (ft.)	Soil/Rock Description	Sample Type /Number	Sample Depth SPT	Blows N-Value	Moisture (%)	Recovery (%) RQD (%)	Unconf. Comp., Tsf	PID (ppm)		
	Soil/Rock Description Brown SANDY CLAY, with Gravel and Brick Fragments, Soft, No Odor	ı se ∏	N D N	M Z	≥ ©	<u> </u>	ממ	F		
1	Orangeish Brown SANDY CLAY , Medium Stiff, No Odor	SS-1	-					0.5		
		SS-2	-					0.3		
4.3	No Recovery BOTTOM OF BORING (5')		5							
			10							
		BORI		ГНОД		SAM	 PLE TY	PE		
	POTESTA 7012 MacCorkle Ave., SE Charleston, WV 25304 Telephone: 304-342-1400	HSA - Ho SFA - So	ollow Ster olid Flight oncrete Co ud Drillin	m Auger : Auger oring	S	T - She C - Roo	t Spoon S lby Tube ck Core Sa g Sample	Sample		

BORING NO.		P43 F6						
PAGE	1	OF	1					

Client :	Huntington Municipal Development Authority Pr	Project No.: 0101-18-0317
		Boring Method: Geoprobe
Location		Weather/ Temp.: Overcast 32°
Start Da		er/ Geologist: Andrew Kirsch
Complet		ZONE
Surface 1	Elevation : Benchmark/El	dev. :
Water L	evel Observations : $\overline{\vee}$ Immediate : $\underline{\nabla}$ A	At completion/# hours /_
Station	: Offset :	Boring Depth: 3.8 Ft.
Stratum Elevation/ Depth (ft.) Lithology	Soil/Rock Description	Sample Type Albumber Sample Depth SPT Blows N-Value Moisture (%) Recovery (%) RQD (%) RQD (%) RQD (%) RQD (%) RQD (%)
	Yellowish Orange SANDY CLAY, Medium Stiff, Moist, No Odor	SS-1 0.6
1.7	Yellowish Orange SANDY CLAY, Stiff, Moist, No Odor	
		SS-2 0.0
3.8	BOTTOM OF BORING (3.8')	
		5_
		10_
		15_
		20
		BORING METHOD SAMPLE TYPE
	7012 MacCorkle Ave., SE	HSA - Hollow Stem Auger SFA - Solid Flight Auger SFA - Shelby Tube Sample
	Charleston, WV 25304 Telephone: 304-342-1400	CC - Concrete Coring RC - Rock Core Sample BS - Bag Sample
	1 cicpitotte. 304-342-1400	HA - Hand Auger

BORING NO.		P43 F7					
PAGE	1	OF	1				

	_	Huntington Municipal De	•	*	Project		_)101-						
•		me: Flint Parcels 43 a		-	Boring					robe				
		Huntington, West Virg			Weath		_	_						
				Field Engine		_	τ:	And	rew	Kirs	cn			
Compl	letio	Date: 11-13-18		Driller: A	ZONE									
		evation:	7 * *	Benchmark/			• ,,,							
		el Observations : $\sqrt{2}$	Immediate :		At con	npleti	ion/#		_		. 41	L.	5 O E4	
Statio	n:		Offs	ei:					SOLI	ng E	ери	n: _	5.0 Ft.	
Stratum Elevation/ Depth (ft.)	Lithology		Soil/Rock Description		Sample Type	/Number	Sample Depth	SPT Blows	N-Value	Moisture (%)	Recovery (%)	RQD (%)	Unconf. Comp., Tsf	PID (ppm)
0.5		Loose GRAVEL , No Odor Yellowish Orange SANDY Cl	LAY, Medium Stiff, Moi	st, No Odor	SS	S-1	_							0.2
1.6	7/1	Yellowish Orange CLAYEY	SAND, Soft, Moist, No C	Odor		M								
2.2		No Recovery												
							5_							
5		BOTTOM OF BORING (5')												
							-							
							10_							
							-							
							15_							
							20							
						BORI	ING N					_	PLE TYP	
	P	OTESTA	7012 MacCork Charleston, W' Telephone: 30	V 25304	SF. CC MI	SA - Ho A - So C - Co O - Mo A - Ha	olid Fli oncrete ud Dri	ght Au Corin lling	iger	S	T -	Shell Rock	Spoon S by Tube S c Core Sa Sample	Sample

BORING NO.		P43 F8		
PAGE	1	OF	1	

_	Huntington Municipal De	•		oject No. ring Met	-	0101-	18-0 eopr					
•	Huntington, West Virg			ather/ T								
Start Date :		giiia	Field Engineer/		_							
Completion			Driller: AZC	_		Allu	iew .	IXIIS	CII			
	<u> </u>											
Surface Ele		7	Benchmark/Ele									
Water Leve Station:	el Observations : $\sqrt{2}$	Immediate : Offse		complet	ion/#		rs <u>/</u> Sorir	, a D	lont	h.	5.0 Ft.	
Station:		Olise					0111	ıg L	ери			
Stratum Elevation/ Depth (ft.) Lithology		Soil/Rock Description		Sample Type /Number	Sample Depth	SPT Blows	N-Value	Moisture (%)	Recovery (%)	RQD (%)	Unconf. Comp., Tsf	PID (ppm)
0.5	Loose GRAVEL , No Odor Yellowish Orange SANDY Cl	LAY, Medium Stiff, Mois	st, No Odor	SS-1	-							0.0
				SS-2	- 5							0.1
5	BOTTOM OF BORING (5')				10							
P	OTESTA	7012 MacCorkl Charleston, W\ Telephone: 30	/ 25304	HSA - Ho SFA - So CC - Co MD - M HA - Ha	olid Fli oncrete lud Dri	Stem A ght Au Coring	uger ger	S R	S - T - RC -	Split Shell Rock	Spoon S by Tube S Core Sa Sample	ample Sample

BORING NO.		P43 G1		
PAGE	1	OF	1	

Client:	Huntington Municipal Development Authorit	y Pr	oject No.	: 0101	-18-03	17			
Project Na	Flint Parcels 43 and 45 Sampling	Bo	oring Met	thod:	Geopro	be			
Location:	Huntington, West Virginia	W	eather/ T	emp. :	Cloud	y 34°			
Start Date	: 11-16-18	Field Engineer	/ Geologi	st: And	drew G	rimme	tt		
Completio	on Date : 11-16-18	Driller: AZO	ONE						
Surface El Water Lev Station:	levation : $\ \ \ \ \ \ \ \ \ \ \ \ \ $			tion/# hou	ırs <u>/</u> Boring	g Dept	h:	5.0 Ft.	
						F	-		
Stratum Elevation/ Depth (ft.) Lithology	Soil/Rock Description		Sample Type /Number	Sample Depth SPT Blows	N-Value Moisture	(%) Recovery (%)	RQD (%)	Unconf. Comp., Tsf	PID (ppm)
1.5	Loose GRAVEL , with Sandy Clay, with Brick Fragmer Odor (FILL) Brown to Orangeish Brown SILTY CLAY , Soft to Me Orangeish Brown SILTY CLAY , Medium Stiff, No Od	dium Stiff, No Odor	SS-1	_					16.5
1.9			SS-2						1.0
5	BOTTOM OF BORING (5')			10_					
_P	OTESTA 7012 MacCorkl Charleston, WV Telephone: 30	V 25304	HSA - H SFA - S CC - C MD - M HA - H	RING METH Iollow Stem A olid Flight A Concrete Corin Mud Drilling Iand Auger Lock Coring	Auger uger	SS ST RC	- Split - Shell - Rock	PLE TYI Spoon S by Tube S c Core Sa Sample	ample Sample

BORING NO.		P43 G2		
PAGE	1	OF	1	

Clien	_	Huntington Municipal Development Authorit	-	ject No. :	0101-							
Proje			•	ring Metho		Geopro						
Locat				ather/ Ten		Sunny						_
Start			Field Engineer/	_	And	lrew (<u> 3rim</u>	ımet	<u>t</u>			
Comp	oletio	on Date : 11-14-18	Driller: AZO	NE								_
		levation:	Benchmark/Elev									_
		vel Observations : \overline{Y} Immediate :		completio		_	ъ	41		1.0.1	٦,	
Stati	on:	Offs	ei: 			Borin	g D	ери	ı; _	1.0 I	٦١.	_
n on/ (ft.)	gy			Sample Type /Number	0		ıe	re	ery		Unconf. Comp., Tsf	
Stratum Elevation/ Depth (ft.)	Lithology			eldum eldum	Sample Depth	SPT Blows	N-Value	Moisture (%)	Recovery (%)	RQD (%)	nconi omp.	
N E N	Li	Soil/Rock Descriptio Refusal at 1 Foot, Unable to Get Through at Several Ar		S _S <	D &	SI	Ż	Z Š	≥ ∞	<u>8</u> %	50	_
		-	Cus / Hound Borning									
1		BOTTOM OF BORING (1')										
					-							
					-	1						
					-	-						
					5_							
					-							
					-	1						
					10							
					10_	1						
					-	-						
					-							
					-							
					15_	-						
					'							
					-	1						
					20							
					G METH		0.0			LE T		
4		OTESTA 7012 MacCork Charleston, W'		HSA - Hollo SFA - Solio	l Flight A	uger	SS ST	Γ -	Shell	y Tub	n Sample be Sample	
		Charleston, W' Telephone: 30		CC - Cond MD - Mud		ng	R			Core Sampl	Sample e	
		Tolophono. Oc		HA - Hand RC - Rock	l Auger				6	r		
				NC - KOCK	Cornig							

BORING NO.		P43 G3		
PAGE	1	OF	1	

Client	t : _	Huntington Municipal Development Authority	y 1	Proje	ect No.	: _()101-	18-0	317				
Proje	ct Na	me: Flint Parcels 43 and 45 Sampling]	Bori	ng Met	hod :	G	eopi	robe				
Locat	ion :	Huntington, West Virginia		Weat	ther/ T	emp.	: _	Sunr	ıy 35	5°			
Start	Date	: _11-14-18	Field Engine	er/ G	eologis	it:	And	rew	Grir	nme	tt		
Comp	letio	n Date : 11-14-18	Driller: A	ZON	IE								
	r Lev	evation : $\ \ \ \ \ \ \ \ \ \ \ \ \ $:	ion/#		rs <u>/</u> Bori	na T) Ont	h•	5.0 Ft.	
Statio)II •	Offse					_ 1	> 011	ilg L	epu			
Stratum Elevation/ Depth (ft.)	Lithology	Soil/Rock Description			Sample Type /Number	Sample Depth	SPT Blows	N-Value	Moisture (%)	Recovery (%)	RQD (%)	Unconf. Comp., Tsf	PID (ppm)
		Loose GRAVEL , Gray, Black, and Tan, with Sandy Cla			SS-1								1.1
2.1		Orangeish Brown SILTY CLAY, Medium Stiff, No Od No Recovery	or		SS-2	-							0.4
4		No Recovery				5							
5		BOTTOM OF BORING (5')				10							
	P	OTESTA 7012 MacCorkl Charleston, WN Telephone: 30	/ 25304		BOR HSA - Ho SFA - So CC - Co MD - M HA - Ho RC - Ro	olid Fli oncrete and Dri and Au	Stem A ght Au Corin lling Iger	uger iger	S	S - ST - RC -	Split Shell Rock	Spoon S by Tube S Core Sa Sample	ample Sample

BORING NO).	P43 G	4
PAGE	1	OF	1

Client	t: _	Huntington Municipal Development Authority Pr	roject No.	: 01	.01-18	3-031	7			
Proje	ct Na	me: Flint Parcels 43 and 45 Sampling Bo	oring Met	thod:	Geo	prob	e			
Locat	ion :	Huntington, West Virginia W	/eather/ T	`emp. :	Su	nny .	35°			
Start	Date	: <u>11-14-18</u> Field Engineer	:/ Geologi	st:	Andre	w Gr	imme	tt		
Comp	letio	n Date: 11-14-18 Driller: AZ	ONE							
Surfa	ce El	evation: Benchmark/El	ev. :							
Wate	r Lev	rel Observations : \overline{Y} Immediate : \overline{Y} A	At complet	tion/# l	ours	_				
Statio	on:	Offset :			Bo	ring	Dept	h:	15.0 F	t
Stratum Elevation/ Depth (ft.)	Lithology	Soil/Rock Description	Sample Type /Number	Sample Depth	Blows	Moisture	(%) Recovery (%)	RQD (%)	Unconf. Comp., Tsf	РШ (ррт)
N EL C	7.7.7	Brown to Orange Brown SANDY CLAY, Medium Stiff, with Gravel, No	o e l	N D D	2 M 2	2 2 3	ಲ 	⊗ ⊗	סט	1
	·	Odor	\							
1		Black to Dark Brown, Loose SAND and GRAVEL, No Odor (FILL)	SS-1							0.4
2.5		Orangeish Brown SILTY CLAY , Medium Stiff, No Odor	_	1						
2.3		Orangeish Brown Sill I CLAI, Medium Sun, No Odor	\ \	1 1						
			SS-2							0.3
				5_						
			SS-3							0.3
	, //XI			\						
	7									
8	$\langle \langle \chi \rangle \langle$	Orangeish Brown SILTY CLAY, Soft, No Odor	SS-4							0.3
	 } 		55-4	\						0.5
10		Orangeish Brown SANDY CLAY , Soft, No Odor		10_						
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,								
			SS-5							0.3
				1						
				1 +						0.2
14	/ / /	Light Brown, Fine SAND , No Odor	SS-6							0.2
		No Recovery		15						
14.5		BOTTOM OF BORING (15')								
15										
				-						
			BOR	20 LING MI	ЕТНОІ)		SAMI	PLE TYI	PE
	4	7012 MacCorkle Ave., SE	HSA - H	Iollow St	em Aug	er	SS ·	- Split	Spoon S	ample
	μ	Charleston, WV 25304	SFA - S CC - C	Concrete C	Coring	r	RC ·	- Rock	by Tube S Core Sa	
		Telephone: 304-342-1400	MD - M HA - H				BS ·	- Bag	Sample	

BORING NO.		P43 G5		
PAGE	1	OF	1	

Client: Huntington Municipal D	evelopment Authority	Project No.: 0101-18-	-0317
Project Name: Flint Parcels 43		Boring Method : Geo	
Location: Huntington, West Vir	ginia	Weather/ Temp.: Clo	oudy 35°
Start Date: 11-14-18	Field Engine	er/ Geologist : Andrew	v Grimmett
Completion Date: 11-14-18	Driller: A	ZONE	
Surface Elevation :	Benchmark/	Elev. :	
Water Level Observations:	∠ Immediate : ▼	At completion/# hours	<u></u>
Station:	Offset :	Bor	ring Depth: 5.0 Ft.
Stratum Elevation/ Depth (ft.) Lithology		Sample Type //Number Sample Depth SPT Blows N-Value	Moisture (%) Recovery (%) RQD (%) Unconf. Comp., Tsf
L D E E	Soil/Rock Description	Sar No Der SAR SP SAR SAR SP S	Moist (%) (%) (%) (%) (%) (%) Unco Comp
Light Brown SANDY CLAY			
1.1 Orangish Brown SANDY CL	AY, Medium Stiff, No Odor	SS-1	1.5
		SS-2	0.2
5 BOTTOM OF BORING (5'		1 5	
		10	
		15_	
		20	G:3577
	7012 MacCorkle Ave., SE	HSA - Hollow Stem Auge	er SS - Split Spoon Sample
▲POTESTA	Charleston, WV 25304 Telephone: 304-342-1400	SFA - Solid Flight Auger CC - Concrete Coring	

BORING NO.		P43 G6		
PAGE	1	OF	1	

Client	:	Huntington Municipal Development Authority Pro	oject No.	: 0101	-18-0	317			
Projec	t Na	me: Flint Parcels 43 and 45 Sampling Bo	ring Met	thod: _(G eopi	obe			
Locati	ion:	Huntington, West Virginia We	eather/ T	'emp. :	Over	cast 3	32°		
Start 1	Date	: <u>11-13-18</u> Field Engineer/	Geologi	st: An	drew	Kirsc	h		
Comp	letio	Driller: AZC	ONE						
Surfac	e El	evation: Benchmark/Ele	ev.:						
Water	Lev	el Observations : \overline{Y} Immediate : \overline{Y} At	t complet	tion/# hou	ırs <u>/</u>				
Statio	n:	Offset :			Bori	ng De	pth:	15.0 F	t
t. e/	У		уре					lsf.	m)
Stratum Elevation/ Depth (ft.)	Lithology		Sample Type /Number	Sample Depth SPT Blows	N-Value	Moisture (%)	(%) (%) (%)	Unconf. Comp., Tsf	РІD (ррт)
Stra Elev Dep	Lith	Soil/Rock Description	Sam	Sample Depth SPT Blows	-\rac{\rac{1}{2}}{2}	Moj Rec	(%) (%) (%)	Cor	PII
		Yellowish Orange SANDY CLAY, Medium Stiff, Moist, No Odor							
1.3	/ . / . }	Black ASPHALT / Red BRICK, with Some Yellowish Orange SANDY	SS-1						2.5
2	, <u>, , , , , , , , , , , , , , , , , , </u>	CLAY, Stiff, Moist, No Odor Yellowish Orange SANDY CLAY, Stiff, Moist, No Odor	-	\					
2	() ()	Tenowish Orange SAND1 CLA1, Sun, Moist, No Odor		1 1					
3.7	. / . /	No Recovery	$\begin{vmatrix} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$						0.0
3.7		No Recovery	/\	\ __					
5	7.7.7	Yellowish Orange SANDY CLAY, with Light Gray Mottling, Medium		5_					
		Stiff to Soft, Moist, No Odor	SS-3						0.1
			33-3	ackslash					0.1
				1					
	() ()			1 1					
[`			SS-4	-					0.2
10		VIII 'I O ONTWOLAY C C M ' A N O I	_	10_					
10	/(X/)	Yellowish Orange SILTY CLAY, Soft, Moist, No Odor	1 //	1					
K			SS-5						0.2
K	/XX			\					
K				7 -					
K			SS-6						0.1
K	//X			15					
15 ×		BOTTOM OF BORING (15')							
				-					
			BOR	20 RING METH	HOD		SAMI	PLE TYI	PE
	4	7012 MacCorkle Ave., SE	HSA - H	Iollow Stem	Auger	SS	- Split	Spoon S	ample
	μ	Charleston, WV 25304	CC - C	olid Flight A Concrete Cori	_	ST RC	- Rock	by Tube i c Core Sa	
		Telephone: 304-342-1400		Iud Drilling Iand Auger		BS	- Bag	Sample	

BORING NO.	P43 G7			
PAGE	1	OF	1	

	t: Huntington Municipal Development Authority Project Name: Flint Parcels 43 and 45 Sampling Bori					_	0101-)317 robe				
•		Huntington, West Vin			Boring Met Weather/ T								
		11 12 10		Field Engine		-	_						
		n Date: 11-13-18		_	ZONE	.	7 1110	ii C vv	IXII)C11			
		<u> </u>											
		evation : el Observations :	$\overline{igspace 2}$ Immediate :	Benchmark/I	At comple	tion/#	t hou	rs /					
Statio		ci Obsci vations.	Offs		71t compie	1011/11			ng I)ept	h:	5.0 Ft.	
					e.								
Stratum Elevation/ Depth (ft.)	Lithology		Soil/Rock Description		Sample Type /Number	Sample Depth	SPT Blows	N-Value	Moisture (%)	Recovery (%)	RQD (%)	Unconf. Comp., Tsf	PID (ppm)
0.5		Loose GRAVEL , No Odor Yellowish Orange SANDY (Brick Lens Noted at 1'	CLAY, Soft, Moist, No Oo	lor	SS-1	-	_						0.0
2	. \.	No Recovery					_						
5		BOTTOM OF BORING (5	')			5							
						-	-						
						-	-						
						10_	-						
						-	-						
						15_	-						
						-	-						
						-	-						
						20							
			_			RING N					_	PLE TYI	
	P	OTESTA	7012 MacCork Charleston, W' Telephone: 30	V 25304	HSA - F SFA - S CC - C MD - M HA - F	olid Fli Concrete Aud Dri	ight Au e Corin illing	ıger	S	ST - RC -	Shell Rock	Spoon S by Tube S c Core Sa Sample	Sample

BORING NO.		P43 G8		
PAGE	1	OF	1	

Client :	Huntington Municipal Development Authority Pr	oject No.	: 01	01-18-	0317			
Project Na	me: Flint Parcels 43 and 45 Sampling Bo	ring Met	hod:	Geop	robe			
Location:	Huntington, West Virginia W	eather/ T	'emp. :	Raiı	1 38°			
Start Date	: <u>11-13-18</u> Field Engineer	/ Geologis	st:	Andrew	Kirs	ch		
Completion	n Date: 11-13-18 Driller: AZG	ONE						
Surface El	evation: Benchmark/Ele	ev.:						
Water Lev	el Observations : ∇ Immediate : ∇ A	t complet	tion/# l	nours <u>/</u>	_			
Station:	Offset :			Bori	ing D	epth:	15.0 F	t.
Stratum Elevation/ Depth (ft.) Lithology	Soil/Rock Description	Sample Type /Number	Sample Depth	Blows N-Value	Moisture (%)	Recovery (%) RQD (%)	Unconf. Comp., Tsf	PID (ppm)
0 0	Loose GRAVEL, No Odor		0211		20			
0.5	Yelowish Orange SANDY CLAY, Medium Stiff, Moist, No Odor	SS-1						0.1
		SS-2	5					0.1
5	Yelowish Orange SANDY CLAY , Soft, Moist, No Odor	SS-3						0.2
		SS-4	10_					0.1
10	Yelowish Orange SANDY CLAY , Soft, Moist, No Odor Sand Lenses Noted at 13.6' to 13.7' and 14.5' to 15'	SS-5	_					0.1
		SS-6	15					0.1
15	BOTTOM OF BORING (15')							
			20					
4	7040 Mas Carlda Avis OF	BOR HSA - H	ING MI				PLE TY t Spoon S	
P	OTESTA 7012 MacCorkle Ave., SE Charleston, WV 25304 Telephone: 304-342-1400	SFA - Se	olid Fligl Concrete (Iud Drilli	nt Auger Coring ing	S R	T - She C - Roc	lby Tube k Core Sa Sample	Sample

BORING NO.		P43 H1		
PAGE	1	OF	1	

Client :	:]	Huntington Municipal D	evelopment Authorit	Ţ	Proje	ct No.	: ()101-	18-0	317				
Project	_	me: Flint Parcels 43	•		•	g Metl								
Locatio	on:	Huntington, West Vir	ginia		Weatl	her/ To	emp.	: _(Clou	dy 3	4°			
Start D	ate	: 11-16-18		Field Engine	eer/ Ge	eologis	t:	And	rew	Grir	nme	tt		
Comple	etioı	Date: 11-16-18		Driller: A	AZONI	E								
Surface	e Ele	evation :		Benchmark/	Elev. :	:								
Water	Lev	el Observations :	✓ Immediate :	Ā	At co	mplet	ion/#	hou	rs <u>/</u>					
Station	n:		Offse	et:				_ B	Bori	ng D	eptl	h: _	5.0 Ft.	
t. e	У				9	Sample Type /Number				•	y		ſsf	m)
Stratum Elevation/ Depth (ft.)	Lithology				1	nple T	Sample Depth	ر ws	N-Value	Moisture (%)	Recovery (%)	Ω _	Unconf. Comp., Tsf	РІD (ррт)
Del Be	=======================================		Soil/Rock Description		5	San /Nu	San Del	SPT Blows	ż	8 ⊗	Rec (%)	RQD (%)	Unc	
		GRAVEL, with Sandy Clay,	Gray to Dark Brown, No	Odor (FILL)		\/								
1.3	7/	Brown to Orangeish Brown S	SILTY CLAY, Medium S	tiff, No Odor	5	SS-1	_							0.6
8						/\	-							
2.7		No Recovery					_							
							-							
							5							
5		BOTTOM OF BORING (5')											
							-							
							-							
							_							
							10							
							10_							
							-							
							-							
							-							
							15_							
							-							
							-							
						ROP	20 ING N	ЕТН	מס			SAMI	LE TYI	PE
		ATEST	7012 MacCork	le Ave., SE		ISA - Ho	ollow S	Stem A	uger		S -	Split	Spoon S	ample
	P	OTESTA	Charleston, W	V 25304	C	SFA - Sc CC - Cc		ght Au Corin					by Tube S Core Sa	
		AIFAIV	Telephone: 30	4-342-1400) M	MD - M HA - Ha				E	BS -	Bag	Sample	

BORING NO.		P43 H2		
PAGE	1	OF	1	

Client :	Huntington Municipal Development Authority	Project	t No.	: ()101-	18-0)317				
	ame: Flint Parcels 43 and 45 Sampling	Boring									
Location	: Huntington, West Virginia	Weath	er/ T	emp.	: _	Sum	my	35°			
Start Dat	e: <u>11-14-18</u> Field Engin	neer/ Geo	ologis	st:	And	rew	Grii	nme	tt		
Completi	on Date : 11-14-18 Driller :	AZONE									
Surface F	Elevation : Benchmark	k/Elev. :									
Water Le	vel Observations :	▼ At con	nplet	ion/#	hou	rs <u>/</u>					
Station:	Offset :				_ I	Bori	ng I)ept	h: _	5.0 Ft.	
> ()		ype						_		Js.	n)
Stratum Elevation Depth (ft.		ple T	nber	ple	٧S	N-Value	sture	overy		onf. ıp., T	РІD (ррт)
Stratum Elevation/ Depth (ft.) Lithology	Soil/Rock Description	Sample Type	Nu.	Sample Depth	SPT Blows	N-N	Moisture (%)	Recovery (%)	RQD (%)	Unconf. Comp., Tsf	PID
	Loose GRAVEL, Gray, Brown, and Tan, No Odor (FILL)										
		SS	S-1	-							2.1
1.4	Orangeish Brown SILTY CLAY, Medium Stiff, No Odor		/\	-							
1/3											
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		SS	S-2								0.6
4.1	No Recovery		L	_							
5	BOTTOM OF BORING (5')			5_							
				_							
				-							
				-							
				10_							
				-							
				-							
				_							
				15_							
				-							
				-							
				-							
			DOP	20_	ATC TOTAL	OP			CART	or transa	DE .
4=	7012 MacCorkle Ave., SE	= HS		ING M				SS -	Split	PLE TYI Spoon S	ample
	Charleston, WV 25304 Telephone: 304-342-140	SF		olid Fli oncrete						by Tube S Core Sa	
	Telephone: 304-342-140	00 МІ) - M	Iud Dri and Au	lling	J				Sample	1
		11/	- 11	ana Al	igui						

BORING NO.		P43 H3		
PAGE	1	OF	1	

Client	t :	Huntington Municipal Development Authori	ty	Project N	No.: (<u>)1</u> 01-	18-03	<u>81</u> 7					
	_	ame: Flint Parcels 43 and 45 Sampling		Boring N									
Locat	ion :	Huntington, West Virginia		Weather	/ Temp.	: _	Cloud	ly 3:	5°				
Start	Date	e: <u>11-14-18</u>	Field Engine	er/ Geolo	gist :	And	rew C	Grim	met	t			
Comp	oletio	on Date : 11-14-18	Driller: A	AZONE									_
Surfa	ce El	levation :	Benchmark/	Elev. :									
		vel Observations : $\sqrt{2}$ Immediate :		At comp	oletion/#	hou!	rs /						_
Statio	on:	Offs		-			- Borin	g D	epth	: _	1.0 F	₹t.	
					be							ب	Π
tion/ (ft.)	logy				le Ty ber	le 1	s	lue	ure	very		nf. 2., Ts	
Stratum Elevation/ Depth (ft.)	Lithology	Soil/Rock Descriptio	n		Sample Type /Number	Sample Depth	SPT Blows	N-Value	Moisture (%)	Recovery (%)	RQD (%)	Unconf. Comp., Tsf	
7 11 11	<u> </u>	Refusal at 1 Foot, Brick and Concrete, Tried Offsetting			01/	57.1	5 7 H						
1													_
						-							
						_							
						5_							
						-							
						_							
						-							
						10_							
						-							
						_							
						_							
						15_							
						_							
						_							
						_							
						_							
						20							
					ORING M	ÆTH					LE T		
	4 R	ATECTA 7012 MacCork	•		Hollow SSolid Fli			SS				Sample e Sample	
	ľ	OTESTA 7012 MacCork Charleston, W		CC	- Concrete	Corin		R	C -	Rock	Core	Sample	
		Telephone: 30)4-342-1400) MD HA	- Mud Dri			B	> -	Bag S	Sample	e	

BORING NO.		P43 H8		
PAGE	1	OF	1	

-	Huntington Municipal Do	-		oject No. oring Met		0101- G	18-0 eopi					
•	Huntington, West Virg			eather/ T			Rain					
Start Date	11 12 10		Field Engineer		-							
Completio				ONE								
Surface E		7 * * *	Benchmark/Ele		• "							
Station:	vel Observations :			t complet	10n/#			ng D	ept]	h:	5.0 Ft.	
								-6 -	· cpu			
Stratum Elevation/ Depth (ft.) Lithology		Soil/Rock Description		Sample Type /Number	Sample Depth	SPT Blows	N-Value	Moisture (%)	Recovery (%)	RQD (%)	Unconf. Comp., Tsf	PID (ppm)
0.6	Loose GRAVEL , No Odor Yellowish Orange SANDY C. Sandy Lens Noted from 4.5' to	LAY, Medium Stiff, Moi o 4.7'	st, No Odor	SS-1	_							0.1
				SS-2	- 5							0.1
5	BOTTOM OF BORING (5')				10							
				BOD	15	ME'DIII	OD			SAMI		DE.
P	OTESTA	7012 MacCork Charleston, WY Telephone: 30	V 25304	HSA - Ho SFA - So CC - Co MD - M HA - Ho	olid Fli oncrete lud Dri	Stem A ght Au Corin lling	uger ger	S	S - T - C -	Split Shell Rock	Spoon S by Tube S Core Sa Sample	ample Sample

BORING NO.		P43 I1		
PAGE	1	OF	1	

	_	Huntington Municipal Dome: Flint Parcels 43	-		Project Boring		_)101- G)317 robe				
•		Huntington, West Virg	• •		Weathe									
		11.16.10	Simu	Field Engine			_	_				tt		
		n Date: 11-16-18		_	AZONE	iogis	•	71110	10 00	OIII	mic			
		evation :		Benchmark/										
			Immediate:		At com	nplet	ion/#	hou	rs /					
Statio			Offs						_	ng D)ept	h:	5.0 Ft.	
Stratum Elevation/ Depth (ft.)	ogy				Sample Type	oer.	le l		lue	nre	'ery		Unconf. Comp., Tsf	PID (ppm)
tratu Eleva Depth	Lithology		Soil/Rock Description		ampl	Num	Sample Depth	SPT Blows	N-Value	Moisture (%)	ecov %)	RQD (%)	Jncor	PID (
лш п	1	SANDY CLAY, with Gravel, Odor (FILL)		rick Fragments, No	0		<u> </u>	мп		20	<u> </u>	E O	1	
1.2	(///	Brown to Orangeish Brown S	ILTY CLAY, Medium S	tiff, No Odor	SS	-1	_							1.9
2.7	1//	No Recovery				Ц	_							
							_							
		POTTOM OF DODAYS (5)					5_							
5		BOTTOM OF BORING (5')												
							-							
							-							
							-							
							10_							
							-							
							_							
							-							
							15_							
							Ī							
							-							
							-							
							-							
							20_							
	4		7012 MacCarl	ام ۵۷۸ ع				IETH Stem A		S		_	PLE TYPE Spoon S	
	P	OTESTA	7012 MacCork Charleston, W Telephone: 30	V 25304	SFA CC MD	A - So - Co - M	olid Fli oncrete	ght Au Corin lling	iger	S	T - RC -	Shell Rock	by Tube S Core Sa Sample	Sample

BORING NO.		P43 I2		
PAGE	1	OF	1	

Client: Huntington Municipal Development Authori	ity Pr	oject No. :	0101-	18-031	7				
Project Name: Flint Parcels 43 and 45 Sampling	Во	oring Method: Geoprobe							
Location: Huntington, West Virginia	W	eather/ Tem	p.: _(Cloudy	35°				
Start Date : 11-14-18	Field Engineer/	Geologist :	Andı	rew G	rimmet	t			
Completion Date : 11-14-18	Driller: AZO	ONE							
Surface Elevation :		ev.: t completion	ı/# hour	rs /_					
Station: Offs	set :		B	oring	Depth	<u>15.0</u>	Ft		
Stratum Elevation/ Depth (ft.) Cithology Soil/Rock Description		Sample Type /Number Sample	Depth SPT Blows	N-Value Moisture	(%) Recovery (%)	KQD (%) Unconf. Comp., Tsf	PID (ppm)		
Loose GRAVEL , Brown, Black, and Gray, with Sand (FILL) 1.4 Orangeish Brown SILTY CLAY , Medium Stiff, No C	•	SS-1	-				0.3		
		SS-2	5_				0.2		
		SS-3	-				0.1		
Orangeish Brown SILTY CLAY, Soft, No Odor Sandy Layers at 12.9' to 13.2' and 14.4' to 15'		SS-4 10	0_				0.4		
		SS-5	-				0.2		
15 BOTTOM OF BORING (15')		SS-6	5				0.3		
		20							
POTESTA 7012 MacCork Charleston, W Telephone: 30	V 25304	HSA - Hollo SFA - Solid CC - Conci MD - Mud I HA - Hand	Flight Au rete Coring Drilling	uger ger	SS - ST - RC -	AMPLE T Split Spoon Shelby Tub Rock Core : Bag Sample	Sample e Sample Sample		

BORING NO.		P43 I3		
PAGE	1	OF	1	

Client: Huntington Municipal Development Authorit	y Project No.: 0101-18-0317
Project Name: Flint Parcels 43 and 45 Sampling	Boring Method: Geoprobe
Location: Huntington, West Virginia	Weather/ Temp.: Sunny 35°
Start Date: 11-14-18	Field Engineer/ Geologist: Andrew Grimmett
Completion Date : 11-14-18	Driller: AZONE
Surface Elevation :	Benchmark/Elev.:
Water Level Observations : $\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	▼ At completion/# hours /_
Station: Offse	
Stratum Elevation/ Depth (ft.) Lithology Soil/Rock Description	Sample Type //Number Sample Depth SPT Blows N-Value Moisture (%) Recovery (%) RQD (%) Unconf. Comp., Tsf
0.4 Cose GRAVEL, Gray, No Odor Orangeish Brown SILTY CLAY, Medium Stiff, No Odor	SS-1 0.4 0.4 SS-2 0.1
5 BOTTOM OF BORING (5')	10
POTESTA 7012 MacCorkly Charleston, WY Telephone: 30	V 25304 SFA - Solid Flight Auger CC - Concrete Coring RC - Rock Core Sample

BORING NO.		P43 I8		
PAGE	1	OF	1	

Client	t: _	Huntington Municipal Development Authority Pr	oject No.	: 0	101-1	18-0)317				
Proje	ct Na	me: Flint Parcels 43 and 45 Sampling Bo	oring Met	thod:	G	eopi	robe	:			
Locat	ion :	Huntington, West Virginia W	eather/ T	emp.	: <u>F</u>	Rain	38°)			
Start	Date	: <u>11-13-18</u> Field Engineer	/ Geologi	st : _	Andı	rew	Kirs	sch			
Comp	letio	n Date : 11-13-18	ONE								
Surfa	ce El	evation: Benchmark/El	ev.:								
Water	r Lev	rel Observations : \overline{Y} Immediate : \overline{Y} A	t comple	tion/#	hour	·s /					
Statio	on:	Offset :			_ B	ori	ng I)ept	h :	15.0 F	t
Stratum Elevation/ Depth (ft.)	Lithology		Sample Type /Number	Sample Depth	SPT Blows	N-Value	Moisture (%)	Recovery (%)	Qi O	Unconf. Comp., Tsf	РШ (ррт)
Neg Eg	Ę	Soil/Rock Description	San	Sar De ₃	SP	ż	¥%	Se Se	RQD (%)	Co	PI
		Light Brown SANDY CLAY, with Gravel, Medium Stiff, Moist, No Odor									
1		Yellowish Orange SANDY CLAY , Medium Stiff, Moist, No Odor	SS-1								1.3
			SS-2	5							0.3
5		Yellowish Orange SANDY CLAY , Soft, Moist, No Odor	SS-3	-							0.2
			SS-4	10_							0.1
11	(Yellowish Orange SANDY CLAY , Very Soft, Wet, No Odor									0.1
			_	$\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $							0.1
12		Yellowish Orange SANDY CLAY, Soft, Moist, No Odor	<u> </u>)							
13.3		Yellowish Orange CLAYEY SAND, Loose, Moist, No Odor	⊢ \	/ 1							
13.8	777	Yellowish Orange SANDY CLAY , with Gray Mottling, Soft, Moist, No Odor	SS-6	\							0.0
15	./ . / /	BOTTOM OF BORING (15')	1	15							
				-							
			BOD	20	TOTTO)D		L	CABAT	י און די פון	DE .
		7012 MacCorkle Ave., SE	HSA - H	RING M Hollow S			5			PLE TYI Spoon S	
	P	Charleston, WV 25304 Telephone: 304-342-1400	SFA - S CC - C MD - M HA - H	olid Flig Concrete Mud Dril	tht Aug Coring ling	ger	S	ST - RC -	Shell Rock	by Tube a Core Sa Sample	Sample

BORING NO.		P45 A1		
PAGE	1	OF	1	

Client : I	Huntington Municipal Development Authority Pr	roject No.	: ()101-	18-0	317				
		oring Met								
Location :		Veather/ To								
Start Date :	: 11-15-18 Field Engineer	r/ Geologis	st:	And	rew	Grii	nme	tt		
Completion	Driller : <u>AZ</u>	ONE								
Surface Ele	evation: Benchmark/El	lev.:								
Water Leve	el Observations : \overline{Y} Immediate : \overline{Y} A	At complet	ion/#	hou	rs <u>/</u>					
Station:	Offset :			_ F	Bori	ng I)eptl	h: _	5.0 Ft.	
Stratum Elevation/ Depth (ft.) Lithology	Soil/Rock Description	Sample Type /Number	Sample Depth	SPT Blows	N-Value	Moisture (%)	Recovery (%)	RQD (%)	Unconf. Comp., Tsf	PID (ppm)
0.2	ASPHALT GRAVEL, with Clayey Sand, Gray with Brown, with Glass, No Odor FILL) Orangeish Brown SILTY CLAY, Medium Stiff, No Odor	SS-1	_							4.9
2.6	No Recovery		_							
5	< BOTTOM OF BORING (5')		10							
△P	7012 MacCorkle Ave., SE Charleston, WV 25304 Telephone: 304-342-1400	HSA - Ho SFA - So	olid Fli oncrete lud Dri	Stem A ght Au Corin lling	uger	S	SS - ST - RC -	Split Shell Rock	PLE TYI Spoon S by Tube S Core Sa Sample	ample Sample

BORING NO.		P45 A2		
PAGE	1	OF	1	

Client: Huntington Municipal Development Authority Pr	roject No.: 0101-18-0317
	oring Method : Geoprobe
Location: Huntington, West Virginia W	Veather/ Temp.: Rainy 34°
Start Date: 11-15-18 Field Engineer	'/ Geologist: Andrew Grimmett
Completion Date: 11-15-18 Driller: AZ	ONE
Surface Elevation : Benchmark/Ele	ev. :
Water Level Observations : ☐ Immediate : ▼ A	at completion/# hours /_
Station: Offset:	Boring Depth: 5.0 Ft.
Soil/Rock Description Soil/Rock Description	Sample Type Number Sample Depth Spr Blows N. Value Moisture (%) Recovery (%) RQD (%) RQD (%) RQD (%) PID (ppm)
0.2 SPHALT GRAVEL, with Sandy Clay, Gray, Brown, and Red, with Glass, No Odor 1.1 Brown to Orangeish Brown SILTY CLAY, Medium Stiff, No Odor	SS-1 2.1
	SS-2 0.6
BOTTOM OF BORING (5')	10
POTESTA 7012 MacCorkle Ave., SE Charleston, WV 25304 Telephone: 304-342-1400	BORING METHOD HSA - Hollow Stem Auger SFA - Solid Flight Auger CC - Concrete Coring MD - Mud Drilling HA - Hand Auger SAMPLE TYPE SAMPLE TYPE ST - Split Spoon Sample ST - Shelby Tube Sample RC - Rock Core Sample BS - Bag Sample

BORING NO.		P45 A3		
PAGE	1	OF	1	

Loca	Huntington Municipal Development Authority Project No.: 0101-18-0317 Project Name: Flint Parcels 43 and 45 Sampling Boring Method: Geoprobe Coation: Huntington, West Virginia Weather/ Temp.: Rainy 34° Completion Date: 11-15-18 Field Engineer/ Geologist: Andrew Grimmett Completion Date: 11-15-18 Driller: AZONE													
	-	<u> </u>												
	r Lev	evation :	☑ Immediate : Offse			.: complet	ion/#		rs <u>/</u> Borir	ng D) Pentl	h:	5.0 Ft.	
	· ·							_ ~		-6 -	тери	_	2.010.	
Stratum Elevation/ Depth (ft.)			Soil/Rock Description			Sample Type /Number	Sample Depth	SPT Blows	N-Value	Moisture (%)	Recovery (%)	RQD (%)	Unconf. Comp., Tsf	PID (ppm)
0.2		GRAVEL, with Gray, Sandy Brown to Orangeish Brown S		iff, No Odor		SS-1	_							2.0
3.5	1////	No Recovery					5							
5		BOTTOM OF BORING (5'	,			ROD	10		O.D.					ne.
	4		7012 MacCarld	م ۵۷۸ ع	-	HSA - H		IETHO Stem A		S			PLE TYI Spoon S	
	P	OTESTA	7012 MacCorkl Charleston, W\ Telephone: 30	/ 25304)	SFA - So	olid Fli oncrete lud Dri and Au	ght Au Corin lling iger	ger	S R	T -	Shell Rock	by Tube S Core Sa Sample	Sample

BORING NO.		P45 A4		
PAGE	1	OF	1	

Client: Huntington Mun	icipal Development Authority P	roject No. :	0101-18-0)317		
Project Name : Flint Par	cels 43 and 45 Sampling B	oring Method	d: Geop	robe		
Location: Huntington, V	Vest Virginia V	Veather/ Tem	p.: Rain	y 34°		
Start Date: 11-15-18	Field Enginee	r/ Geologist :	Andrew	Grimmet	tt	
Completion Date: 11-15	5-18 Driller : <u>A2</u>	ONE				
Surface Elevation :	Benchmark/E	lev.:				
Water Level Observations	: ∇ Immediate : ∇	At completion	n/# hours <u>/</u>			
Station:	Offset :		Bori	ng Deptl	5.0 Ft.	·
Stratum Elevation/ Depth (ft.) Lithology	Soil/Rock Description	Sample Type /Number	Depth SPT Blows N-Value	Moisture (%) Recovery (%)	RQD (%) Unconf. Comp., Tsf	PID (ppm)
Brown SILTY CL	AY, Soft, with Roots, No Odor ILTY CLAY, Medium Stiff, No Odor	SS-1	-			1.1
5 BOTTOM OF BO	RING (5')	SS-2 S	5			0.9
		10				
		15				
POTES	7012 MacCorkle Ave., SE Charleston, WV 25304 Telephone: 304-342-1400		w Stem Auger Flight Auger rete Coring Drilling	SS - ST - RC -	SAMPLE TY Split Spoon S Shelby Tube Rock Core Sa Bag Sample	Sample Sample

BORING NO.		P45 A5		
PAGE	1	OF	1	

Client: Huntington Municipal Development Authority	Project No.: 0101-18-0317
	Boring Method : Geoprobe
Location: Huntington, West Virginia	Weather/ Temp.: Rainy 34°
Start Date: 11-15-18 Field Engine	er/ Geologist: Andrew Grimmett
Completion Date: 11-15-18 Driller: A	ZONE
Surface Elevation : Benchmark/I	Elev. :
Water Level Observations : $\overline{\square}$ Immediate :	At completion/# hours /_
Station: Offset:	Boring Depth: <u>5.0 Ft.</u>
Stratum Elevation/ Depth (ft.) Lithology Soil/Rock Description	Sample Type Number Sample Depth Blows N-Value (%) Recovery (%) RQD (%) Unconf. Comp., Tsf
Son/Rock Description \(\seta \) Brown SILTY CLAY , Soft, with Trace Roots, No Odor	
1.1 Orangeish Brown SILTY CLAY, Medium Stiff, No Odor	SS-1 1.5
	SS-2 0.7
5 BOTTOM OF BORING (5')	10
POTESTA 7012 MacCorkle Ave., SE Charleston, WV 25304 Telephone: 304-342-1400	HSA - Hollow Stem Auger SFA - Solid Flight Auger CC - Concrete Coring MD - Mud Drilling HA - Hand Auger SAMPLE TYPE SS - Split Spoon Sample ST - Shelby Tube Sample RC - Rock Core Sample BS - Bag Sample

BORING NO.		P45 B1		
PAGE	1	OF	1	

Start	ct Na ion : Date	Huntington, West Virg	and 45 Sampling	Bor	_	hod : emp.	: _]	eopi Rain	robe ıy 34	ļ°	tt		
Comp		11 13 10		<u> </u>									
Wate	Vater Level Observations: \[\sum_{\text{Immediate}} \] \[\sum_{\text{Station}} \] \[\sum_{\text{Immediate}} \] \[\sum_{Imme												
					d)								
Stratum Elevation/ Depth (ft.)	Lithology		Soil/Rock Description		Sample Type /Number	Sample Depth	SPT Blows	N-Value	Moisture (%)	Recovery (%)	RQD (%)	Unconf. Comp., Tsf	PID (ppm)
0.2		ASPHALT SANDY CLAY, with Gravel, (FILL)	Briwk, and Glass Fragme	ents, Slight Odor	SS-1								1.8
2.3		Grayish Brown SILTY CLAY No Recovery	Y, Medium Stiff, No Odor			_							
2.5		·				_							
						5_							
5		BOTTOM OF BORING (5')				10							
						ING M						PLE TYP	
	P	OTESTA	7012 MacCorkl Charleston, WV Telephone: 30	/ 25304	HSA - Ho SFA - So CC - Co MD - M HA - Ha	olid Fli oncrete lud Dri	ght Au Corin lling	ıger	S	ST - RC -	Shell Rock	Spoon Saby Tube Sac Core Sa Sample	Sample

BORING NO.		P45 B2		
PAGE	1	OF	1	

Client: Huntington Municipa Project Name: Flint Parcels	/	Project No. : Boring Meth	_		8-031′ oprob				
Location: Huntington, West		Veather/ Te			ainy 3				
C4 4 D 4 11 17 10	Field Enginee		_				eff		
Completion Date: 11-15-18		ZONE	-	7 Kilait	ow GII				
Surface Elevation :	Benchmark/E								
Water Level Observations :		At completi	ion/#	hours	s /				
Station:	Offset:	-			- oring l	Dept	h:	5.0 Ft.	
		g g				T .			
Stratum Elevation/ Depth (ft.) Lithology	Soil/Rock Description	Sample Type /Number	Sample Depth	SPT Blows	N-Value Moisture	Recovery (%)	RQD (%)	Unconf. Comp., Tsf	PID (ppm)
(1) (1) (1)	Silty Clay (FILL), nO oDOR								
1 Gray to Orangeish Brow	n SILTY CLAY, Medium Stiff, No Odor	SS-1	-						0.9
		SS-2	-						0.9
4.5 No Recovery			5						
5 BOTTOM OF BORING	G (5')				'				
			10						
	7040 M . O . I . A	BORI HSA - Ho		ETHO				PLE TYI Spoon S	
▲POTEST	7012 MacCorkle Ave., SE Charleston, WV 25304 Telephone: 304-342-1400	SFA - Sol CC - Co MD - Mu HA - Ha	lid Flig ncrete ud Dril	tht Aug Coring ling	er	ST RC	- Shel - Rocl	by Tube k k Core Sa Sample	Sample

BORING NO.		P45 B3		
PAGE	1	OF	1	

Client: Huntington Municip Project Name: Flint Parcel	*	roject No. : Soring Metho	0101-	18-031 eoprob				
Location: Huntington, Wes	-	Veather/ Ter						
Start Date: 11-14-18	E: IIE :					\ft		
Completion Date: 11-14-1		ZONE	· Aliu	icw Gi	IIIIIIC	<i>.</i>		
Surface Elevation :	Benchmark/E	'	/# h					
Water Level Observations : Station :	$ \overline{Y} $ Immediate: $ \underline{\Psi} $ Offset:	At completion		rs <u>/</u> Boring	Dent	h•	5.0 Ft.	
	Onset .			Jorning	П	· .		
Stratum Elevation/ Depth (ft.) Lithology	Soil/Rock Description	Sample Type // Number	Sample Depth SPT Blows	N-Value Moisture	(%) Recovery (%)	RQD (%)	Unconf. Comp., Tsf	РІО (ррт)
0.2 ASPHALT Loose GRAVEL, Gray	. No Odon							
Loose GRAVEL, Gray	TY CLAY, Medium Stiff, No Odor	SS-1	_					4.7
		SS-2						1.5
5 BOTTOM OF BORIN	NG (5')	/ /	5					
			10_					
			20 J	OD		CARAT	of E TVI)F
▲ POTEST	7012 MacCorkle Ave., SE Charleston, WV 25304 Telephone: 304-342-1400	HSA - Holi SFA - Soli CC - Con MD - Muc HA - Han	d Flight Au crete Corin d Drilling	uger iger	SS ST RC	- Split - Shell - Rock	PLE TYI Spoon S by Tube S Core Sa Sample	ample Sample

BORING NO.		P45 B4		
PAGE	1	OF	1	

	_	Huntington Municipal Developm	•	Project No.		0101-1					
•		me: Flint Parcels 43 and 45 S		Boring Metl			eopro				
		11.15.10	E: 11E :	Weather/ To	_		Rainy		-44		
		: 11-15-18		_	ι:	Andı	ew C	TIIIIII	ett		
Comp	neuo	n Date: 11-15-18	Driller : _A	ZONE							
		evation:	Benchmark/I	-	• '''						
		∇ el Observations : ∇ Imme		At completi	10 n /#			~ D	41	5 O E4	
Statio	on :		Offset :			_ в	orin	g Dep	ın:	5.0 Ft.	
Stratum Elevation/ Depth (ft.)	Lithology	Soil/Roc	k Description	Sample Type /Number	Sample Depth	SPT Blows	N-Value Moisture	(%) Recovery	(%) RQD (%)	Unconf. Comp., Tsf	PID (ppm)
0.2	0000	ASPHALT		_/A \ \ \ \ \							
0.4		GRAVEL, No Odor Orangeish Brown to Brown SILTY CL	AY, Medium Stiff, No Odor	SS-1	-						0.9
2.3	// V /	No Recovery			5						
5		BOTTOM OF BORING ((5')			10						
	P	Char	MacCorkle Ave., SE leston, WV 25304 phone: 304-342-1400	HSA - Ho SFA - So CC - Co MD - Mi HA - Ha	ollow S olid Flig oncrete ud Dril	ght Aug Coring Iling	uger ger	SS ST RC BS	- Split - Shel - Rocl	PLE TYI Spoon S by Tube S k Core Sa Sample	ample Sample

BORING NO.		P45 B5		
PAGE	1	OF	1	

Client: Huntington Municipal Developmen	nt Authority Pro	ject No. :	0101-	18-0317	7		
Project Name: Flint Parcels 43 and 45 San	mpling Bor	ing Metho	od : <u>G</u>	eoprobe	e		
Location: Huntington, West Virginia	Wes	ather/ Ter	mp.: _1	Rainy 3	3°		
Start Date: 11-15-18	Field Engineer/	Geologist	: And	rew Gri	mmett		
Completion Date : 11-15-18	Driller : _AZO	NE					
Surface Elevation :	Benchmark/Elev	v .:					
Water Level Observations : $\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	iate: ▼ At	completio	on/# hou	rs <u>/</u>			
Station:	Offset :		F	Boring 1	Depth:	5.0 Ft.	
Stratum Elevation/ Depth (ft.) Lithology I Stock I	Description	Sample Type /Number	Sample Depth SPT Blows	N-Value Moisture	Recovery (%)	(%) Unconf. Comp., Tsf	PID (ppm)
0.2 ASPHALT GRAVEL, No Odor	\int_{Γ}						
0.4 GRAVEL, NO Odor Brown to Orangeish Brown SILTY CLAY	Y, Medium Stiff, No Odor	SS-1	_				3.6
		SS-2	5				1.1
5 BOTTOM OF BORING (5')			10	OD	SA	MPLE TY	PE
Δ P() F \ Δ Charle	MacCorkle Ave., SE ston, WV 25304 one: 304-342-1400	HSA - Holl SFA - Soli CC - Con MD - Muc HA - Han	low Stem A id Flight Au acrete Corin d Drilling	uger ger	SS - S ST - S RC - F	Split Spoon Schelby Tube Rock Core Sa Bag Sample	ample Sample

BORING NO.		P45 C1		
PAGE	1	OF	1	

Client: Huntington Municipal Development Authority Project No.: 0101-18-0317 Project Name: Flint Parcels 43 and 45 Sampling Boring Method: Geoprobe Location: Huntington, West Virginia Weather/ Temp.: Rainy 33° Start Date: 11-15-18 Field Engineer/ Geologist: Andrew Grimmett Completion Date: 11-15-18 Driller: AZONE Surface Elevation: Water Level Observations: Station: Offset: Boring Depth: 5.0 Ft.										
Stratum Elevation/ Depth (ft.) Lithology	Soil/Rock Description		Sample Type /Number	Sample Depth SPT	Blows N-Value	Moisture (%)	Recovery (%)	RQD (%)	Unconf. Comp., Tsf	PID (ppm)
0.2	ASPHALT GRAVEL, with Sandy Clay, Gray and Brown, Slight C Gray to Orangeish Brown SILTY CLAY, Medium Stif		SS-1 SS-2	-						0.8
5	BOTTOM OF BORING (5')			10						
▲P	OTESTA 7012 MacCork Charleston, WY Telephone: 30	V 25304	HSA - H SFA - So CC - Co MD - M HA - H	20 ING MET ollow Ster blid Flight oncrete Co fud Drillin and Auger	n Auger Auger oring	S R	S - T - .C -	Split Shell Rock	PLE TYI Spoon S by Tube S c Core Sa Sample	ample Sample

BORING NO.		P45 C2		
PAGE	1	OF	1	

_	Huntington Municipal Do			•	ct No. ig Met		0101-)317 robe				
•	Huntington, West Virg		-		her/ T				y 33				
Start Date			Field Enginee			_					tt		
Completio				ZONI	_								
Surface El		7.~	Benchmark/E				, -						
Water Lev Station :	vel Observations : $\sqrt{2}$			At co	omplet	ion/#)eptl	h•	5.0 Ft.	
Station .		Ons			4)		_ •	701 11	iig L	cpu			
Stratum Elevation/ Depth (ft.) Lithology		Soil/Rock Description		E -	Sample Type /Number	Sample Depth	SPT Blows	N-Value	Moisture (%)	Recovery (%)	RQD (%)	Unconf. Comp., Tsf	PID (ppm)
0.2	ASPHALT GRAVEL, Gray with Brick F Brown SILTY CLAY, Medi No Recovery	ragments, Slight Odor um Stiff, No Odor		:	SS-1	5							0.5
5	BOTTOM OF BORING (5')				BOR	10	ЛЕТН	OD			SAMH	PLE TYP	PE.
P	OTESTA	7012 MacCork Charleston, WV Telephone: 30	V 25304	S C N	HSA - H SFA - So CC - Co MD - M HA - H	olid Fli oncrete lud Dri	ght Au Corin Iling	ger	S	T - RC -	Shell Rock	Spoon Soy Tube Soy Core Sa Sample	Sample

BORING NO.		P45 C3		
PAGE	1	OF	1	

_	Huntington Municipal Devare: Flint Parcels 43 ar		-	Project No. Boring Met		0101-1 G	18-0: eopr					
•	Huntington, West Virgi			Veather/ T					5°			
Start Date	11 14 10		Field Enginee		-			_		tt		
Completion			o .	ZONE								
Surface El			Benchmark/E		• "		,					
Water Lev Station:	∇ rel Observations : ∇	Immediate : Offse		At complet	110n/#		rs <u>/</u> Sorin	ıg D	eptl	ո :	5.0 Ft.	
Stratum Elevation/ Depth (ft.) Lithology	S	Soil/Rock Description		Sample Type /Number	Sample Depth	SPT Blows	N-Value	Moisture (%)	Recovery (%)	RQD (%)	Unconf. Comp., Tsf	PID (ppm)
0.3	ASPHALT Loose GRAVEL, Gray, No Ode Orangeish Brown SILTY CLA		dor	SS-1	_							4.6
4.3	No Recovery			SS-2	5							0.7
5	BOTTOM OF BORING (5')			ROR	10	ІЕТНО	מכ			SAMH	PLE TYP	ÞE.
P	() - \ \	7012 MacCorkl Charleston, W\ Telephone: 30	/ 25304	HSA - H SFA - So CC - C MD - M HA - H	ollow S olid Flig oncrete Iud Dril	Stem A ght Au Coring lling	uger ger	S R	S - T - C -	Split Shell Rock	Spoon S by Tube S Core Sa Sample	ample Sample

BORING NO.		P45 C4		
PAGE	1	OF	1	

Client: Huntington Mur	nicipal Development Authority F	Project No.: (0101-18-031	17
Project Name : Flint Pa	crcels 43 and 45 Sampling	Boring Method :	Geoprol	be
Location: Huntington,	West Virginia V	Weather/ Temp.	: Rainy	33°
Start Date : 11-15-18	Field Enginee	er/ Geologist :	Andrew G	rimmett
Completion Date: 11-1	<u>15-18</u> Driller : <u>A2</u>	ZONE		
Surface Elevation :	Benchmark/E	Elev. :		
Water Level Observation	s: $\sqrt{2}$ Immediate: $\sqrt{2}$	At completion/#	hours /	
Station:	Offset :		_ Boring	Depth: 5.0 Ft.
oon/ (ft.)		Type r	le re	ry .: .Tsf
Stratum Elevation/ Depth (ft.) Lithology	Soil/Rock Description	Sample Type /Number Sample Depth	SPT Blows N-Value Moisture	(%) Recovery (%) RQD (%) Unconf. Comp., Tsf
ASPHALT	Sold Note: Dobbing and		<u>он</u> 2 2	
M()/ OKA LED	Orangeish Brown SILTY CLAY, Medium Stiff, No	/ SS-1		1.3
		_		
		SS-2		
				0.7
5 BOTTOM OF BO	ORING (5')	1 5		
		_		
		_		
		10		
		10_		
		_		
		_		
		_		
		15		
		-		
		-		
		-		
		20		
,		BORING M		SAMPLE TYPE
△ D∧TEC'	7012 MacCorkle Ave., SE	HSA - Hollow S SFA - Solid Fli	ght Auger	SS - Split Spoon Sample ST - Shelby Tube Sample
POTES	Charleston, WV 25304 Telephone: 304-342-1400	CC - Concrete MD - Mud Dri		RC - Rock Core Sample BS - Bag Sample
	. 5.551101101 001 012 1400	HA - Hand Au		

BORING NO.		P45 C5		
PAGE	1	OF	1	

Client: Huntington Municipal Development Authority	Project No.: 0101-18-0317	
Project Name: Flint Parcels 43 and 45 Sampling	Boring Method: Geoprobe	
Location: Huntington, West Virginia	Weather/ Temp.: Rainy 33°	
Start Date: <u>11-15-18</u> Fie	ld Engineer/ Geologist : Andrew Grimmett	
Completion Date : 11-15-18 Dr	iller: AZONE	
Surface Elevation : Be	nchmark/Elev. :	
Water Level Observations :	▼ At completion/# hours /_	
Station: Offset:	Boring Depth: <u>5.0 Ft</u>	
um (ft.)	Sample Type Number Sample Depth SPT Blows N-Value Moisture (%) Recovery (%) Recovery (%) Recovery (%) Unconf.	PID (ppm)
Scratum Elevation/ Depth (ft.) Cithology Soil/Rock Description	Sample Ty Number Sample Depth SPT Blows N-Value Moisture (%) Recovery (%) (%) (%)	PID
0.2 ASPHALT GRAVEL, No Odor Grayish Brown to Orangeish Brown SILTY CLAY, Medium Odor	SS-1	2.5
	SS-2	0.9
5 BOTTOM OF BORING (5')	10	PE
POTESTA 7012 MacCorkle A Charleston, WV 28 Telephone: 304-3	Ve., SE SA - Hollow Stem Auger SFA - Solid Flight Auger CC - Concrete Coring SS - Split Spoon S ST - Shelby Tube RC - Rock Core Se	Sample Sample

BORING NO.		P45 D2		
PAGE	1	OF	1	

Client: Huntington Municipal Development Authorit	y Project No.: 0101-18-0317
Project Name: Flint Parcels 43 and 45 Sampling	Boring Method: Geoprobe
Location: Huntington, West Virginia	Weather/ Temp.: Rainy 34°
Start Date: 11-15-18	Field Engineer/ Geologist: Andrew Grimmett
Completion Date : 11-15-18	Driller: AZONE
Surface Elevation :	Benchmark/Elev.:
Water Level Observations : $\overline{\vee}$ Immediate :	▼ At completion/# hours /_
Station: Offse	
Stratum Elevation/ Depth (ft.) Lithology Soil/Rock Description	Sample Type //Number Sample Depth SPT Blows N-Value Moisture (%) Recovery (%) RQD (%) Unconf. Comp., Tsf
0.2 O.4 ASPHALT GRAVEL, No Odor Brown to Orangeish Brown SILTY CLAY, Medium S	
5 BOTTOM OF BORING (5')	SS-2
	10_
	15_
ARATPATA 7012 MacCork	e Ave., SE BORING METHOD SAMPLE TYPE HSA - Hollow Stem Auger SS - Split Spoon Sample ST - Strik Spoon Sample
POTESTA 7012 MacCorki Charleston, WV Telephone: 30	/ 25304 SFA - Solid Flight Auger ST - Shelby Tube Sample RC - Rock Core Sample

BORING NO.		P45 D3		
PAGE	1	OF	1	

	_	Huntington Municipal Dome: Flint Parcels 43			Project N Boring M)101- G)317 robe				
•		Huntington, West Vir			Weather/									
Start		11 14 10		Field Enginee			-	_		_		tt		
		n Date : 11-14-18		_	ZONE	8-5			2011					
	rface Elevation : Benchmark/Elev. :													
		rel Observations :	Immediate:		At comp	leti	on/#					_		
Statio	on:		Offse	et:				ł	3ori	ng I)ept	h:	5.0 Ft.	
Stratum Elevation/ Depth (ft.)	Lithology		Soil/Rock Description		Sample Type /Number		Sample Depth	SPT Blows	N-Value	Moisture (%)	Recovery (%)	RQD (%)	Unconf. Comp., Tsf	PID (ppm)
0.2	0 0	ASPHALT Loose GRAVEL, Gray, No C	Mar			M								
0.9	$\frac{3}{\lambda}$	Orangeish Brown SILTY CL	AY, Medium Stiff, No O	dor	SS-1	X	-							8.2
	(1,00	No Recovery				Ц	_							
1.8		no necovery					-							
							5							
5		BOTTOM OF BORING (5'))											
							=							
							_							
							_							
							10_							
							-							
							_							
							-							
							15_							
							-							
							_							
							-							
					D.	OPT	20 NG N	ATE PET T	OP			CART	PLE TYI	DE .
			7012 MacCork	اع ۵۷۵ کا	HSA -			IETH Stem A		S		_	Spoon S	
	P	OTESTA	Charleston, WY Telephone: 30	V 25304		- Sol - Co - Mu	lid Fli ncrete ıd Dri	ght Au Corin lling	ıger	S	ST - RC -	Shell Rock	by Tube S Core Sa Sample	Sample

BORING NO.		P45 D4		
PAGE	1	OF	1	

Client	:	Huntington Municipal Development Authority P	roject No.	: ()101-	18-0)317				
	_		Soring Met								
Locati	ion :	Huntington, West Virginia V	Veather/ T	emp.	: _(Clou	ıdy 3	35°			
Start 1	Date	: <u>11-14-18</u> Field Engineer	r/ Geologis	st:	And	rew	Grii	nme	tt		
Comp	letio	n Date: 11-14-18 Driller: AZ	ZONE								
Surfac	ce El	evation : Benchmark/E	lev. :								
Water	Lev	∇ rel Observations : ∇ Immediate : ∇ A	At complet	tion/#	hou	rs <u>/</u>					
Statio	n:	Offset :			_ F	Bori	ng I)ept	h:	5.0 Ft.	
Stratum Elevation/ Depth (ft.)	Lithology	Soil/Rock Description	Sample Type /Number	Sample Depth	SPT Blows	N-Value	Moisture (%)	Recovery (%)	RQD (%)	Unconf. Comp., Tsf	PID (ppm)
	□ □ □	ASPHALT	/ se	S	B	Z	20	~ =	20	ט כו	
0.2		GRAVEL, Gray, No Odor Orangeish Brown SILTY CLAY, Medium Stiff, No Odor	SS-1	_							6.8
4.5			SS-2	_							12.8
5		BOTTOM OF BORING (5')		5_							
		No Recovery		10_							
				ING N						PLE TY	
	P	7012 MacCorkle Ave., SE Charleston, WV 25304 Telephone: 304-342-1400	HSA - H SFA - So CC - C MD - M HA - H	olid Fli oncrete Iud Dri	ght Au Corin lling	iger	S	ST - RC -	Shell Rock	Spoon S by Tube & Core Sa Sample	Sample

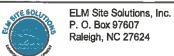
BORING NO.		P45 D5		
PAGE	1	OF	1	

	Municipal Development Authority t Parcels 43 and 45 Sampling		ject No. : ing Meth	-	18-031 eoprob				
Location: Huntington	on, West Virginia	Wea	ather/ Te	mp. : _	Cloudy	35°			
Start Date : 11-14-1	8	Field Engineer/ (Geologist	: And	rew Gr	imme	ett		
Completion Date : 1	1-14-18	Driller: AZO	NE						
Surface Elevation : _ Water Level Observati	rface Elevation : Benchmark/Elev. : ater Level Observations : ✓ Immediate : ✓ At completion/# hours /_								
Station:	Offset	t:]	Boring	Dept	h: _	4.5 Ft.	
Stratum Elevation/ Depth (ft.) Lithology	Soil/Rock Description		Sample Type /Number	Sample Depth SPT Blows	N-Value Moisture	(%) Recovery (%)	RQD (%)	Unconf. Comp., Tsf	PID (ppm)
	ray, No Odor n SILTY CLAY , Medium Stiff, No Odor own SILTY CLAY , Medium Stiff, No Odo	or	SS-1	-					11.3
			SS-2						3.7
BOTTOM OI	F BORING (4.5')			5					
POTE	7012 MacCorkle Charleston, WV Telephone: 304	25304	HSA - Ho		Auger	SS ST RC	- Split - Shell - Rock	Spoon S. Sy Tube State Core Sa Sample	ample Sample

ELM LOGS

ELM Site Solutions, Inc. **BORING NUMBER TMW-19 / AOC11-01** P. O. Box 97607 PAGE 1 OF 2 Raleigh, NC 27624 CLIENT BASE PROJECT NAME Former BASF Huntington Works Facility PROJECT NUMBER PROJECT LOCATION Huntington, West Virginia DATE STARTED 8/1/16 COMPLETED 8/1/16 TOC ELEVATION 547.2 ft HOLE SIZE 3.5 IN DRILLING CONTRACTOR EnviroProbe **GROUND WATER LEVELS:** DRILLING METHOD Direct Push AT TIME OF DRILLING _-LOGGED BY T. Taylor CHECKED BY J. Odom AT END OF DRILLING _---NOTES AFTER DRILLING ____ ENVIRONMENTAL DATA SAMPLE TYPE NUMBER BLOW COUNTS (N VALUE) GRAPHIC LOG DEPTH MATERIAL DESCRIPTION WELL DIAGRAM ENVIRONMENTAL BH - GINT STD US.GDT - 12/19/16 20:34 - C.,USERSPUBLICIDOCUMENTS/BENTLEY/GINTPROJECTS/BASF HUNTINGTON DATA GAP (SEPT. 2016) - TOM3.GP. (OL) Dark brown and gray silt with slag (FILL) 546.7 (CL) Reddish brown silty day, moist, cohesive. 10 533,2 (SP) Yellowish red to light brown fine sand with fine sandy 15 clay layers, moist 19.0 528.2 (SP) Dark gray very fine sand, trace to little clay, wood fragments, wet. 526.2 11 Dark gray peat (Pt), moist. 4 34 524.2 (SP) Light brown to grayish brown fine sand, trace to little fine to medium rounded gravel, moist (ALLUVIUM). 518.2 (GC) Light brownish gray clayey fine to coarse sand and

517.2



BORING NUMBER TMW-19 / AOC11-01 PAGE 2 OF 2

CLIENT B			PROJECT NAME Former BASE Huntington \ PROJECT LOCATION Huntington, West Virg	
DEPTH (ff) SAMPLE TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
1			Bottom of horehole at 30 0 feet	

	·
STE SOLUTION	ELM Site Solutions, Inc. P. O. Box 97607 Raleigh, NC 27624

BORING NUMBER TMW-20 / AOC11-02 PAGE 1 OF 1

OT & SEPTEMBER			
CLIENT BASF		PROJECT NAME Former BASE Hun	ntington Works Facility
		PROJECT LOCATION Huntington, V	
		TOC ELEVATION 547.51 ft	HOLE SIZE 3,5 IN
DRILLING CONTRACTOR EnviroPro			
DRILLING METHOD Direct Push			
LOGGED BY T. Taylor	CHECKED BY _J. Odom		
NOTES		AFTER DRILLING	
SAMPLE TYPE NUMBER BLOW COUNTS (N VALUE) ENVIRONMENTAL DATA	GR.	ERIAL DESCRIPTION	WELL DIAGRAM
		silt and gravel (FILL)	547.0
10	(CH) Light brown to y cohesive.	ellowish red plastic clay, moist,	531.5
		ry fine sandy clay, wet, cohesive.	
	18.0		529,5
	(SP) Strong brown fin	e sand, moist.	528,5
		to some very fine sand, few layers of	523.5
25	(SP) Reddish yellow f	ine sand, trace to little clay, wet.	
25	Botton	of borehole at 25.0 feet.	522.5

		BOLUNDA	ELM Site : P. O. Box Raleigh, N		nc.			BORING NUMBER TMW-21 / AOC11-03 PAGE 1 OF				
	CLIEN	IT BASE						PROJECT NAME Former BASE Hunting	ton Works Facility			
	ı							PROJECT LOCATION Huntington, West				
								TOC ELEVATION 548.58 ft				
								GROUND WATER LEVELS:	-			
								AT END OF DRILLING				
		s						AFTER DRILLING				
7	O DEPTH	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	ENVIRONMENTAL DATA	GRAPHIC LOG		MAT	ERIAL DESCRIPTION	WELL DIAGRAM			
13.GP						0.5		54	8,1			
ENVIRONMENTAL BH - GINT STD US.GDT - 12/19/16 20:34 - C:\USERSYPUBLIC\DOCUMENTS\BENTLEY\GINT\PROJECTS\BASF HUNTINGTON DATA GAP (SEPT. 2018) - TOMS.GPJ	5											
EY/GINT/PROJECTS/BASF	10											
PUBLICYDOCUMENTS/BENT	15											
3DT - 12/19/16 20:34 - C:\USERS	20											
ENVIRONMENTAL BH - GINT STD US.G												

WELL LOG



Well No.:

TMW-1D

Date:

6/25/02

Permit Number:

WV00226-0022-02

Project Name:

BASF

ELM Inspector:

K. Pollack

Boring Method: Sampler Type:

Hollow Stem Auger

Project Location: Huntington, WV

Total Well Depth (ft):

53.5

Straight Augering

Project No.:

99184

Depth to Groundwater (ft): 40

Drilling Contractor: Triad

M. Lupardis

Blow	C C	Soil		Depth	9	PID	
Counts	88	Туре	Soil Description/Observations	1	Sample		Completion
or Rate	% Recovery	Symbol	,	ft (0.1)	Sa	(ppm)	
		-	ASPHALT/ROADSTONE				100
		i	No lithology described	h ~			
				F 7			
			No lithology described	<u>├</u> 5 <u> </u>		0	
				⊢ ⊣			
				F . 7			
			No lithology described	10		0	
				F 7			
			Br Silty CLAY; damp, no odor, pliable,	15		0	
			sticky	L -			
				F 7			
			Br Silty CLAY; damp, no odor, pliable,	20		0	
	ļ	<u> </u>	sticky				
			Gy-Br Silty CLAY, trace f Sand; damp, no	F 7		1	
			odor, pliable, sticky	25		0	
			Gy-Br Silty CLAY, trace f Sand; no odor				
				F 7			
			Br Silty CLAY, trace f Sand; occasional	30		0	
	1		cobbles, no odor				
				F 7			
			Br f-m SAND, some Silt; no odor, wet,	35		0	
			occasional cobbles	E d			
				F 40 -			
			Br f-m SAND, some Silt; few cobbles, no	 40 ∃		0	
			odor, wet to saturated	는 크			
				├ ₄₅ ┤			
			Br m-f SAND, some Silt; few cobbles, no	45 -		0	
			odor, saturated, whipped-loamy				
17.				50		0	
			Br m-f SAND, trace Silt; no odor, saturated,	$\vdash \circ \dashv$] °	
			few cobbles	F =			第三数
				55		0	
			Br m-f SAND, trace Silt; no odor, saturated	F " 7) v	
			Br f-m SAND, trace Silt; no odor, saturated				
	<u> </u>		- /	<u> </u>		0	1 .
Notes:				Abbreviati	on Leg	end:	
No samples	collecte	ed.		f - fine		Or - O	range
Top of casir	ıg eleva	tion is 548.		m - mediu	m	Gy - G	_
		bit more sil	ty with trace/some cobbles. Not just fine sand as with			•	-
other location				c - coarse		Gr - Gr	
10' Screen -			Bl - Black		Lt - Li	_	
Well kept ri			ung sand.	Br - Brown	1	Dk - D	ark
Flush moun	i suttac	e					
			<u></u>	1			

WELL LOG

Depth to Groundwater (ft): 35



Well No.: Project Name:

Project No.:

TMW-9D

BASF

Project Location: Huntington, WV

99184

Date:

ELM Inspector:

Total Well Depth (ft):

6/26/02

K. Pollack

54.5

Permit Number: WV00226-0021-02

Boring Method:

Hollow Stem Auger

Sampler Type:

Straight Augering

Drilling Contractor: Triad

M. Lupardis

						. Lupardis
Blow Counts %	Soil Type	Soil Description/Observations	Depth ft (0.1)	Sample	PID (ppm)	Completion
or Rate	Symbol		11 (0.1)	Š	(ppm)	
		GRAVEL	-			
		No lithology described				
			<u> </u>		0	
		No lithology described	F '-			
			10 -		0	
		No lithology described	- " =			
			F =			
	1		<u> </u>		0	
		Br Silty CLAY; no odor, pliable				
Į.						
		7 074 07 457 4 00 1	<u> </u>	<u> </u>	0	
	1	Br Silty CLAY, trace f Sand; no odor				
			b =			
41	_	Br m-f SAND, trace Silt; no odor	25 —		0	
		Br m-1 SAND, trace Sitt, no odor				
[1					
		Br m-f SAND, trace Silt; no odor, moist	 30 -		0	
		Bi M-i SAIND, trace Sitt, no odot, moist		1		
ļ						
		Br f SAND, trace c-m Gravel, trace Silt;	35		0	
		running sands, no odor, saturated	F =	-		
					1	
		Br f SAND, trace c-m Gravel, trace Silt;	40 —		0	
		running sands, no odor, saturated	-	1		
	1			1		
		Br f SAND, some Silt, trace c-m Gravel;	45 -		0	
		running sands, occasional rounded cobbles,	<u> </u>	}		
		saturated, no odor	F =	-		
		Br f SAND, some Silt, trace c-m Gravel;	50 -		0	
		running sands, occasional rounded cobbles,		1		
		saturated, no odor		1	1 ^	
		Br f SAND, some Silt, trace c-m Gravel;	55 —	-	0	
		running sands, occasional rounded cobbles,	≠ :		1 0	
		saturated, no odor	<u> </u>			
Notes:			Abbreviat	ion Le	gend:	
Bedrock at 57.5'			f - fine		Or - O	range
Total depth 54.5			m - mediu	ım	Gy - G	_
Screen 10'					-	-
Stick-up Well			c - coarse		Gr - G	
No samples coll	ected		Bl - Black		Lt - Li	_
			Br - Brow	TI	Dk - D	ark
<u></u>	·					



Princeton, New Jersey Holicong, Pennsylvania Bethlehem, Pennsylvania New York, New York Boonton, New Jersey

MONITORING WELL TMW-12D PAGE 1 OF 2

PROJECT NAME Former BASF Huntington Works Facility	DATE STARTED
PROJECT NUMBER 099184	DATE COMPLETED 7/7/09
LOCATION 5th Avenue & 24th Street Huntington West Virginia	CASING TYPE/DIAMETER PVC
DRILLING METHOD Hollow Stem Auger	SCREEN TYPE/\$LOT 4" PVC 10 Slot Screen
BOREHOLE DIAMETER 8-inch	GRAVEL PACK TYPEMedium Sand
SAMPLING METHOD Macrocore / Split Spoon	SEAL TYPE Cement
LOGGED BY Brad Mescavage	GROUT TYPE Bentonite
PERMIT #	DEPTH TO WATER (ft BGS) 22.23
ш	

	PID (ppm)	BLOW	RECOVERY (feet)	CORE	ENV SAMPLE	DEPTH (ft. BGS)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT	WEL	L DIAGRAM
ľ	0							GRAVEL (dry)	0.5	41 41	
	0 0 0 0		5	AU 1		- 1 - - 2 - - 3 - - 4 -		Br, Or-Br silty CLAY (dry) (soft)	5.0		
ЗРJ	0 0 0 0 0 0 0		5	MC 2		- 6 - - 7 - - 8 - - 9 -		Brown, Orange Brown silty CLAY, trace gray mottled clay (moist)	10.0		
EW.	0				1	<u> </u> 10—		Brown silty CLAY, trace f sand (moist)			
GS	0					- 11 -			11.5		
210	0					- 12 -		Brown f-m SAND (dry)	11.7		
ELM DATA TEMPLATE.GDT - 5/13/10 10:27 - CAPHASE II RFI BORING LOGS NEW.GP.	0 0 0		5	MC 3		- 13 - - 14 -		Brown, Red-Brown mottled silty CLAY (moist)	15.0		
4ASE	0					15		Brown f-m SAND (dry)	15.6		
5	0					- 16 -		Brown silty f-m SAND (dry)	16.5		
27 - 1	0					- 17 -	****	Brown silty CLAY, some f-m sand (dry)	1		
9	0		5	МС				Brown, Orange-Brown, Gray f-m SAND, some silt (wet)	17.4		
13/1	0			4		- 18 -			18.7		
- 5	0					- 19 -	1///	Gray CLAY (wet)	1.5.7		
GD	ŏ					—20—			20.0		
H.	0					20	8888	Orange-Brown f-m SAND, trace c sand (dry)			-Cement Seal
Ā	ŏ					- 21 -			21.5		
E	0					- 22 -		Orange-Brown f-c SAND (wet)			-4" PVC Riser
ATA	٥		3.5	MC					22.2		. ,
¥	0			5		- 23 -		Gray f-c SAND, trace gravel (wet)	23.2 23.5	\bowtie	
Ë						- 24 -		No Recovery	1		
Š						-25-			25.0		
NO.	0							Gray f-c SAND (wet)			
D C	0					- 26 -			26.5 26.7		
ELM WELL CONSTRUCTION LOG-	0					- 27 -	9000	GRAVEL (wet)	26.7		
Ö	0		4	MC				Brown, Orange-Brown f-c SAND, some s-m gravel (wet)			
늷	0			6		- 28 -					
\$	0					- 29 -			29.2		
딃								No Recovery	30.0		



Princeton, New Jersey Hollcong, Pennsylvania Bethlehem, Pennsylvania New York, New York Boonton, New Jersey

MONITORING WELL TMW-12D PAGE 2 OF 2

PROD LOCA DRIL BORI SAMI	JECT NU ATION LING MI EHOLE I	JMBER 5th A ETHOD DIAME METHOR	Venue Ho TER D Meso	8 24 Blow 8-i lacro	4th Stre Stern / nch ocore / ge	eet Hunt Auger Split Sp	n Works Facility ington West Virginia oon	DATE COMPLETED CASING TYPE/DIAMETI SCREEN TYPE/SLOT GRAVEL PACK TYPE SEAL TYPE Cement	7/7/09 ERPVC4" PVC 10 SlotMedium Sand			L DIAGRAM
0 0 0 0 0 0 0 0 0 0		3,5	MC 7		- 31 - - 32 - - 33 - - 34 -		Brown f-c SAND, some s-l g		33.5			
(GP)		5	MC 8		35 - 36 - - 37 - - 38 - - 39 -		Brown, Dark Brown f-m SAN Brown, Dark Brown f-c SAN	D, some s-m gravel (wet)		38.5		
II RFI BORING LOGS NEW GPU		2.5	MC 9		- 41 - - 42 - - 43 - - 44 -		Brown, Dark Brown f-c SANI No Recovery	D, trace gravel (wet)		42.2		Bentonite Grout
GDT - 6/13/10 10:27 - C:NPHASE II RFI		1.5	MC 10		45 - 46 - - 47 - - 48 - - 49 - 50		Dark Brown f-c SAND, trace No Recovery	coal fragments (wet)		46.6		-4" PVC Screen
ELM WELL CONSTRUCTION LOG - ELM DATA TEMPLATE.GDT - 5/13/10 10:27		O	MC 11		- 51 - - 52 - - 53 - - 54 -		Bottom of bor	ehole at 54.5 feet.		54.5		
ELM WELL CONSTRUCT												

ELM Site Solutions, Inc. **BORING NUMBER TMW-26** P. O. Box 97607 PAGE 1 OF 1 Raleigh, NC 27624 **CLIENT BASF** PROJECT NAME Former BASF Huntington Works Facility PROJECT NUMBER PROJECT LOCATION _Huntington, West Virginia DATE STARTED 8/10/16 COMPLETED 8/12/16 TOC ELEVATION 547.64 ft HOLE SIZE 6.0 IN DRILLING CONTRACTOR EnviroProbe **GROUND WATER LEVELS:** DRILLING METHOD Direct Push AT TIME OF DRILLING _---LOGGED BY T. Taylor CHECKED BY J. Odom AT END OF DRILLING ____ **Y**AFTER DRILLING 24.98 ft / Elev 522.66 ft TOC (08/29/2016) NOTES ENVIRONMENTAL DATA SAMPLE TYPE NUMBER BLOW COUNTS (N VALUE) GRAPHIC LOG MATERIAL DESCRIPTION WELL DIAGRAM Casing Top Elev: 547.64 (ft) Casing Type: PVC ENVIRONMENTAL BH - GINT STD US.GDT - 12/19/16 20:34 - C:USERSV-UBLICDOCUMENTS/BENTLEY/GINT/PROJECTS/BASF HUNTINGTON DATA GAP (SEPT. 2016) - TOM3. GPJ ▼Flush-mount Asphalt and subbase .547.2 manhole with steel (CH) Yellowish red plastic clay, moist lid Grout DP-1 PID = 0.1 DP-2 P1D = 0.2538.6 (CL-ML) Yellowish red silty clay, moist, cohesive PID = 0.3 Bentonite Seal 2" Sch. 40 PVC riser DP-3 PID = 0.4533.€ (CL) Yellowish red very fine sandy clay, moist PID = 0.4DP-4 PID = 0.4528.€ (SP) Yellowish red fine sand, trace to little clay, moist (ALLUVIUM) PID = 0.4(CL) Light brown very fine sandy clay, wet (ALLUVIUM) DP-5 PID = 0.8524.1 (SP) Yellowish red fine sand, wet (ALLUVIUM) PID = 0.6 DP-6 Sand Pack 2" pre-packed well screen (GW) Yellowish red fine to coarse sand and gravel, rounded, 30 trace clay, wet (ALLUVIUM) DP-7

Bottom of borehole at 35.0 feet.

512.6

ELM Site Solutions, Inc. **BORING NUMBER TMW-27** P. O. Box 97607 PAGE 1 OF 1 Raleigh, NC 27624 **CLIENT** BASF PROJECT NAME Former BASE Huntington Works Facility PROJECT NUMBER PROJECT LOCATION Huntington, West Virginia DATE STARTED 8/10/16 COMPLETED 8/12/16 TOC ELEVATION 547.28 ft HOLE SIZE 6.0 IN DRILLING CONTRACTOR EnviroProbe **GROUND WATER LEVELS:** DRILLING METHOD Direct Push AT TIME OF DRILLING _____ LOGGED BY T. Taylor CHECKED BY J. Odom AT END OF DRILLING ____ NOTES **Y** AFTER DRILLING 24.64 ft / Elev 522.64 ft TOC (08/29/2016) ENVIRONMENTAL DATA SAMPLE TYPE NUMBER BLOW COUNTS (N VALUE) GRAPHIC LOG MATERIAL DESCRIPTION WELL DIAGRAM Casing Top Elev: 547.28 (ft) Casing Type: PVC C:USERSIPUBLICIDOCUMENTS/BENTLEY/GINTPROJECTS/BASF HUNTINGTON DATA GAP (SEPT. 2016) - TOM3.GP. Asphalt and subbase Flush-mount manhole with steel (CH) Yellowish red plastic clay, moist lid Grout DP-1 PID = 0.4 DP-2 PID = 0.1538,1 (CL-ML) Yellowish red silty day, moist, cohesive 10 PID = 0.2 Bentonite Seal 535.1 (CL) Yellowish red very fine sandy clay, moist, cohesive 2" Sch. 40 PVC riser DP-3 PID = 0.3534.3 (CL-ML) Yellowish red silty day, moist, cohesive 533.1 (CL) Yellowish red very fine sandy clay, moist, cohesive PID = 0.3 DP-4 PID = 0.1 528.8 (SP-SC) Yellowish red fine sand, trace to some day, moist (ALLUVIUM) 20 PID = 0.2DP-5 PID = 0.7 ENVIRONMENTAL BH - GINT STD US.GDT - 12/19/16 20:34 -PID = 0.6(SP) Light brown fine sand, wet (ALLUVIUM) DP-6 Sand Pack 2" pre-packed well (GW) Yellowish red fine to coarse sand and fine to medium screen gravel, rounded, wet (ALLUVIUM) DP-7

512.3

(SP) Brown fine sand, trace fine to medium gravel, wet

ELM Site Solutions, Inc. **BORING NUMBER TMW-28** P. O. Box 97607 PAGE 1 OF 1 Raleigh, NC 27624 PROJECT NAME Former BASE Huntington Works Facility **CLIENT** BASF PROJECT NUMBER PROJECT LOCATION Huntington, West Virginia COMPLETED 8/15/16 DATE STARTED 8/10/16 TOC ELEVATION 547.45 ft HOLE SIZE 6.0 IN DRILLING CONTRACTOR EnviroProbe **GROUND WATER LEVELS:** DRILLING METHOD _Direct Push AT TIME OF DRILLING ____ LOGGED BY J. Odom __ CHECKED BY _T. Taylor_ AT END OF DRILLING _---**Y**AFTER DRILLING 24.85 ft / Elev 522.60 ft TOC (08/29/2016) NOTES ENVIRONMENTAL DATA SAMPLE TYPE NUMBER BLOW COUNTS (N VALUE) GRAPHIC LOG MATERIAL DESCRIPTION WELL DIAGRAM Casing Top Elev: 547.45 (ft) Casing Type: PVC C:USERSI<u>P</u>UBLICIDOCUMENTS\BENTLEY\G\NT\PROJECTS\BASF HUNT\NGTON DATA GAP (SEPT. 2016) - TOM3.GR. Asphalt and subbase Flush-mount manhole with steel (CH) Yellowish red plastic clay, moist Grout DP-1 PID = 0.2DP-2 PID = 0.1538,5 (CL-ML) Yellowish red silty clay, moist 10 PID = 0.1 Bentonite Seal 535.5 2" Sch. 40 PVC riser (CL) Yellowish red very fine sandy clay, moist, cohesive DP-3 PID = 0.3534.5 (CL-ML) Yellowish red silty clay, moist 14.0 533.5 (CL) Yellowish red very fine sandy clay, moist, cohesive PID = 0.3530.5 (SP) Yellowish red fine sand, moist DP-4 PID = 0.3529.5 (CL) Yellowish red fine sandy day, moist, cohesive 20 PID = 0.2(SP) Yellowish red fine sand, moist (ALLUVIUM) DP-5 PID = 0.3ENVIRONMENTAL BH - GINT STD US.GDT - 12/19/16 20:34 25 PID = 4.1 520.0 DP-6 Sand Pack (GW) Light brown fine sand and fine to medium gravel, rounded, wet (ALLUVIUM) 2" pre-packed well screen 30 DP-7 514.5 (SP) Brown fine sand, trace fine to medium gravel, wet (ALLUVIUM)

Bottom of borehole at 35.0 feet.

512.5

ELM Site Solutions, Inc. **BORING NUMBER TMW-29** P. O. Box 97607 PAGE 1 OF 1 Raleigh, NC 27624 CLIENT BASE PROJECT NAME Former BASE Huntington Works Facility PROJECT NUMBER PROJECT LOCATION Huntington, West Virginia DATE STARTED 8/11/16 COMPLETED <u>8/15/16</u> TOC ELEVATION 547.47 ft HOLE SIZE 6.0 IN DRILLING CONTRACTOR EnviroProbe **GROUND WATER LEVELS:** DRILLING METHOD Direct Push AT TIME OF DRILLING _---LOGGED BY _T. Taylor CHECKED BY _J. Odom AT END OF DRILLING _--NOTES ▼ AFTER DRILLING 24.93 ft / Elev 522,54 ft TOC (08/29/2016) ENVIRONMENTAL DATA SAMPLE TYPE NUMBER BLOW COUNTS (N VALUE) GRAPHIC LOG DEPTH (ft) MATERIAL DESCRIPTION WELL DIAGRAM Casing Top Elev: 547.47 (ft) Casing Type: PVC C:USERSIPUBLICIDOCUMENTS\BENTLEY\GINT\PROJECTS\BASF HUNTINGTON DATA GAP (\$EPT. 2018) - TOM3.GP, Flush-mount Asphalt and subbase 547.0 manhole with steel (CH) Yellowish red plastic clay, moist lid \Grout DP-1 PID = 4.5 DP-2 PID = 4.6538.5 (CL-ML) Yellowish red silty clay, moist, cohesive 10 PID = 4.4Bentonite Seal 2" Sch. 40 PVC riser DP-3 PID = 4.2 534.5 (CL) Yellowish red very fine sandy clay, few thin layers of clayey fine sand (SC), moist to wet, 532.5 PID = 2.3 (SP) Yellowish red fine sand, trace to little day, moist (ALĹUVIUM) 530.0 DP-4 PID = 4.4(CL) Yellowish red very fine sandy clay, moist (ALLUVIUM) 528.5 (CL) Gray very fine sandy clay, moist (ALLUVIUM) 20 PID = 5.5 DP-5 23.0 PID = 5.7524 (SP) Gray fine sand, moist (ALLUVIUM) -Yellowish red at 24' GINT STD US.GDT - 12/19/16 20:34 PID = 6.3 (GW) Brown and yellowish red fine to coarse sand and gravel, rounded, trace day, wet (ALLUVIUM) DP-6 Sand Pack 2" pre-packed well screen 30 ENVIRONMENTAL, BH-DP-7

Bottom of borehole at 35.0 feet.

<u>512.5</u>

	A STE	SOLUTION	ELM Site P. O. Box Raleigh, N		C.				BORING	NUM	BER TMW-30 PAGE 1 OF 1	
	CLIEN'	T BASF				_		PROJECT NAME For	rmer BASF Huntingtor	Works Fa	cility	
								PROJECT LOCATION				
- 1								TOC ELEVATION 547.37 ft HOLE SIZE 6.0 IN				
								GROUND WATER LEV	VELS:			
- 1					CHEC	KED BY	Y _J. Odom	AT END OF DRI				
	NOTES							AFTER DRILLIN	IG 24.91 ft / Elev 52	2.46 ft TOC	(08/29/2016)	
	O DEPTH	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	ENVIRONMENTAL DATA	GRAPHIC LOG			ERIAL DESCRIPTION	Casing Top Elev: 547 Casing Type: PVC	(1)	VELL DIAGRAM	
M3.G				ļ	////		Asphalt and subbase (CH) Yellowish red pla	atic clay moiet	547.0		Flush-mount manhole with steel	
AP (SEPT, 2016) - TO	5	DP-1		PID = 3			(CH) Tellowisi Leu pia	stic day, moist			lid Grout	
UTSBENTLEYGINTPROJECTSBASF HUNTINGTON DATA GAP (SEPT. 2016) - TOM3.GPJ	10	DP-2		PID = 4.5		9.5	(CL) Vellowich red ven	y fine sandy clay, moist	537.9			
3ASF				PID = 12.5				· · · · · · · · · · · · · · · · · · ·				
CTSV]					- 1		nes (SC) between 10' an			■Bentonite Seal	
YGINTIPROJE	15	DP-3		PID = 7.2			- fine sand layers (SP)	at 16.5' to 17' and 18.5'	to 19', moist		~2" Sch. 40 PVC riser	
MENTSYBENTLE	-	DP-4		PID = 13								
OCC I												
SEC.	20		-	D'D - 6	Y/F/FA	19.5	(SP) Yellowish red fine	sand, trace fine to media	527.9 um gravel,			
SVPUE	4			PID = 6		n	ounded, moist (ALLU)	/IUM)				
6 20:34 - C:\USER	25	DP-5		PID = 5.9	2	25.0 🔻			522,4			
STD US.GDT - 12/19/1	-	DP-6		PID = 6.3		(4	GW) Yellowish red fin gravel, rounded, wet (A	e to medium sand and fir LLUVIUM)			Sand Pack −2" pre-packed well screen	
VIRONMENTAL BH - G	30 -	DP-7				55.0			512.4		Sur con	

Bottom of borehole at 35.0 feet.

ELM Site Solutions, Inc. **BORING NUMBER TMW-31** P. O. Box 97607 PAGE 1 OF 1 Raleigh, NC 27624 **CLIENT BASF** PROJECT NAME Former BASF Huntington Works Facility PROJECT NUMBER PROJECT LOCATION Huntington, West Virginia DATE STARTED 8/11/16 COMPLETED 8/15/16 TOC ELEVATION 546.9 ft HOLE SIZE 6.0 IN DRILLING CONTRACTOR EnviroProbe **GROUND WATER LEVELS:** DRILLING METHOD _Direct Push AT TIME OF DRILLING ____ LOGGED BY T. Taylor CHECKED BY J. Odom AT END OF DRILLING ____ **AFTER DRILLING** 24.41 ft / Elev 522.49 ft TOC (08/29/2016) NOTES ENVIRONMENTAL DATA SAMPLE TYPE NUMBER BLOW COUNTS (N VALUE) GRAPHIC LOG DEPTH (ft) MATERIAL DESCRIPTION WELL DIAGRAM Casing Top Elev: 546.9 (ft) Casing Type: PVC ENVIRONMENTAL BH-GINT STD US.GDT - 12/19/16 20:34 - C:USERS/PUBLIC/DOCUMENTS/BENTLEY/GINT/PROJECTS/BASF HUNTINGTON DATA GAP (SEPT. 2016) - TOM3.GP. ▼Flush-mount Asphalt and subbase manhole with steel (CH) Yellowish red plastic clay, moist Grout DP-1 PID = 1 DP-2 PID = 2.8537.4 10 (CL) Yellowish red very fine sandy clay, moist, cohesive PID = 2.3536.4 (CL-ML) Yellowish red silty clay, moist, cohesive Bentonite Seal 2" Sch. 40 PVC riser DP-3 PID = 3.3531.9 PID = 2.1 (CL) Yellowish red very fine sandy clay with layers of fine sand (SP), moist (ALLUVIUM) DP-4 PID = 4.5 20 526.9 PID = 3.7 (SP) Yellowish red fine sand, moist (ALLUVIUM) - some fine to coarse gravel at 24' DP-5 PID = 3.5 (GW) Strong brown fine to medium sand and fine to coarse gravel, trace clay, wet (ALLUVIUM) DP-6 Sand Pack 2" pre-packed well screen 30 DP-7 511.9

Bottom of borehole at 35.0 feet.

APPENDIX D

Table 1. Soil Boring Summary Planned Marshall University Baseball Stadium Site Huntingon, Cabell County, West Virginia

Soil Boring ID	Date Drilled	Depth	Notes	Highest PID Reading (ppm-v/v)
P (0 · · ·	44455	_	Parcel 43	
P43-A1	11/16/2018		Slight odor from 2.1' - 2.6'	0.4
P43-A2	11/16/2018		Slight odor from 0.2' - 2.5' Sample submitted from 0 - 3'	2.1
P43-A3	11/16/2018	5		0.7
P43-A4			Omitted from original plan due to builiding location	
P43-A5			Omitted from original plan due to builiding location	
P43-A6	11/16/2010	~	Omitted from original plan due to builiding location	4.0
P43-A7	11/16/2018		Slight sewage like odor from 0' - 2.8'	4.8
P43-A8	11/16/2018			0.7
P43-B1	11/16/2018			10.4
P43-B2	11/16/2018			9
P43-B3	11/16/2018	5		0.7
P43-B4			Omitted from original plan due to builiding location	
P43-B5	44.4.		Omitted from original plan due to builiding location	
P43-B6	11/13/2018		Green layer 0.3' - 0.5' Sample submited from 0 - 2 '	0
P43-B7	11/13/2018			0.2
P43-B8	11/13/2018			0
P43-C1	11/16/2018	5		0.7
P43-C2			Omitted from original plan due to builidng location	
P43-C3			Omitted from original plan due to builidng location	
P43-C4			Omitted from original plan due to builidng location	
P43-C5			Omitted from original plan due to builidng location	
P43-C6	11/13/2018			0.2
P43-C7	11/13/2018			0
P43-C8	11/13/2018		White to light gray material from 1.8' - 7.5' Slight odor from 1.8' - 7.5'	0
P43-D1	11/16/2018	5		9.6
P43-D2			Omitted from original plan due to builidng location	
P43-D3	11/14/2018			0.1
P43-D4	11/14/2018		Sewage like odor, 0' - 1.2'	1.8
P43-D5	11/14/2018			1
P43-D6	11/13/2018	5		0.2
P43-D7	11/13/2018	10	White to pale yellowish orange material from 1.3 - 10' Slight sewage like odor from 5' - 10'. Sample Submited from 5' - 7.5'	0
P43-D8	11/13/2018	10	White to light gray material from 2' - 7' Slight sewage like odor from 2' - 7'	0
P43-E1	11/16/2018	5		0.8
P43-E2			Omitted from original plan due to builidng location	
P43-E3	11/14/2018	5	Slight sewage like odor from 0' - 1.5'. Sample submited from 0 - 2.5'	16.2
P43-E4	11/14/2018	15	Slight sewage like odor from 0' - 2'	0.4
P43-E5	11/14/2018	4.2		0
P43-E6	11/13/2018	15		0.1
P43-E7	11/13/2018	10	White to light gray material from 0.5' - 2.4' Slight sewage like odor from 0.5' - 2.4'	2
P43-E8	11/13/2018	15		0.2
P43-F1	11/16/2018	5		6.3
P43-F2	11/14/2018	15	Slight sewage like odor from 0 - 1.8'. Sample submited from 0 - 2.4'	4.7
P43-F3	11/14/2018	5	Slight sewage like odor from 0 - 1.8'	0.3
P43-F4	11/14/2018	5		0.3
P43-F5	11/14/2018	5		0.5

Table 1. Soil Boring Summary Planned Marshall University Baseball Stadium Site Huntingon, Cabell County, West Virginia

P43-F6 11/13/2018 3.8 0.6 P43-F7 11/13/2018 5 0.02 P43-F3 11/13/2018 5 0.01 P43-G3 11/4/2018 5 0.1 P43-G3 11/4/2018 5 0.1 P43-G4 11/4/2018 5 0.4 P43-G4 11/4/2018 5 0.4 P43-G5 11/14/2018 5 0.5 P43-G6 11/13/2018 15 0.2 P43-G8 11/13/2018 5 0.0 P43-G8 11/13/2018 5 0.0 P43-G8 11/13/2018 5 0.0 P43-H1 11/4/2018 5 0.0 P43-H1 11/4/2018 5 0.0 P43-H3 11/14/2018 5 0.0 P43-H4 Omitted from original plan due to building location P-43-H5 Omitted from original plan due to building location P43-H3 11/4/2018 5 0.0 P43-H3 11/15/2018 5 0.0 P43-H3 11/15/2018 5 0.0 P45-H3 11/15/2018 5 0.0	Soil Boring ID	Date Drilled	Depth	Notes	Highest PID Reading (ppm-v/v)	
P43-F8 11/13/2018 5 16.5 P43-G1 11/14/2018 5 Refusal at 1 foot, tried offsetting several areas around boring P43-G3 11/14/2018 5 1.1 P43-G3 11/14/2018 5 1.5 0.4 P43-G5 11/14/2018 5 1.5 0.4 P43-G6 11/13/2018 15 0.5 0.5 P43-G8 11/13/2018 15 0.5 0.5 P43-H1 11/16/2018 5 0.6 P43-H1 11/16/2018 5 0.6 P43-H3 11/14/2018 1 Refusal at 1 foot, tried offsetting several areas around boring. Brick and concrete in end of tube P-43-H3 11/14/2018 1 Refusal at 1 foot, tried offsetting several areas around boring. Brick and concrete in end of tube P-43-H3 11/14/2018 1 Refusal at 1 foot, tried offsetting several areas around boring. Brick and concrete in end of tube P-43-H3 11/14/2018 1 Refusal at 1 foot, tried offsetting several areas around boring. Brick and concrete in end of tube P-43-H3 11/14/2018 1 Refusal at 1 foot, tried offsetting several areas around boring. Brick and concrete in end of tube P-43-H3 11/14/2018 1 Refusal at 1 foot, tried offsetting several areas around boring. Brick and concrete in end of tube P-43-H3 11/14/2018 1 Refusal at 1 foot, tried offsetting several areas around boring. Brick and concrete in end of tube P-43-H3 11/14/2018 1 Refusal at 1 foot, tried offsetting several areas around boring. Brick and concrete in end of tube P-43-H3 11/14/2018 1 Refusal at 1 foot, tried offsetting several areas around boring. Brick and concrete in end of tube P-43-H3 11/14/2018 1 Refusal at 1 foot, tried offsetting several areas around boring. Brick and concrete in end of tube P-43-H3 11/14/2018 1 Refusal at 1 foot, tried offsetting several areas around boring. Brick and concrete in end of tube P-43-H3 11/14/2018 1 Refusal at 1 foot, tried offsetting several areas around boring. Brick and concrete in end of tube P-43-H3 11/14/2018 1 Refusal at 1 foot, tried offsetting several areas around boring.	P43-F6	11/13/2018	3.8		0.6	
P43-G1 11/16/2018 5 Refusal at 1 foot, tried offsetting several areas around boring P43-G3 11/14/2018 5	P43-F7	11/13/2018	5		0.2	
P43-G2 11/14/2018 1 Refusal at 1 foot, tried offsetting several areas around boring 1.1 P43-G3 11/14/2018 15 0.4 P43-G5 11/14/2018 5 1.5 P43-G6 11/13/2018 15 0.5 P43-G6 11/13/2018 15 0.5 P43-G1 11/13/2018 15 0.2 P43-H3 11/14/2018 5 0.6 P43-H1 11/16/2018 5 0.6 P-43-H1 11/14/2018 5 Refusal at 1 foot, tried offsetting several areas around boring. Brick and concrete in end of tube on titled from original plan due to building location P-43-H3 11/14/2018 5 0.0 P-43-H4 Omitted from original plan due to building location P-43-H4 Omitted from original plan due to building location P-43-H4 11/13/2018 5 0.1 P-43-H8 11/13/2018 5 0.9 P43-13 11/14/2018 5 0.9 P43-14 11/14/2018 5 0.9 P43-15 Omitted from original plan due to building location P43-16 Omitted from original plan due to building location P43-17 Omitted from original plan due to building location P43-18 11/13/2018 5 0.9 P43-19 Omitted from original plan due to building location P43-19 Omitted from original plan due to building location P43-19 Omitted from original plan due to building location P43-10 Omitted from original plan due to building location P43-11 11/15/2018 5 0.0 P43-12 11/14/2018 5 0.0 P43-13 11/15/2018 5 0.0 P43-14 11/15/2018 5 0.0 P43-15 Omitted from original plan due to building location P43-16 0.0 P43-17 Omitted from original plan due to building location P43-18 11/15/2018 5 0.0 P45-A2 11/15/2018 5 0.0 P45-B3 11/15/2018 5 0.0 P45-B4 11/15/2018 5 0.0 P45-B3 11/15/2018 5 0.0 P45-B3 11/15/2018 5 0.0 P45-B3 11/15/2018 5 0.0 P45-B4 11/15/2018 5 0.0	P43-F8	11/13/2018	5		0.1	
P43-G3 11/14/2018 5	P43-G1	11/16/2018	5		16.5	
P43-G4 11/14/2018 5 1.	P43-G2	11/14/2018	1	Refusal at 1 foot, tried offsetting several areas around boring		
P43-G5 11/14/2018 5	P43-G3	11/14/2018	5		1.1	
P43-G6 11/13/2018 15 0.0 P43-G7 11/13/2018 5 0.0 P43-G8 11/13/2018 5 0.0 P43-H1 11/16/2018 5 0.6 P-43-H2 11/14/2018 5 0.6 P-43-H3 11/14/2018 1 P-43-H4 P-43-H5	P43-G4	11/14/2018	15		0.4	
P43-G7	P43-G5	11/14/2018	5		1.5	
P43-G8 11/13/2018 15 0.2 P43-H1 11/16/2018 5 0.6 P43-H2 11/4/2018 1 Refusal at 1 foot, tried offsetting several areas around boring. Brick and concrete in end of tube P43-H3 11/4/2018 1 Refusal at 1 foot, tried offsetting several areas around boring. Brick and concrete in end of tube P43-H4 Omitted from original plan due to building location P43-H5 Omitted from original plan due to building location P43-H8 11/13/2018 5 0.1 P43-H8 11/14/2018 5 0.1 P43-H1 11/14/2018 5 0.1 P43-H2 11/14/2018 5 0.1 P43-H3 11/14/2018 5 0.1 P43-H4 Omitted from original plan due to building location P43-H5 Omitted from original plan due to building location P43-H6 Omitted from original plan due to building location P43-H7 Omitted from original plan due to building location P43-H6 Omitted from original plan due to building location P43-H6 Omitted from original plan due to building location P43-H7 Omitted from original plan due to building location P43-H8 11/13/2018 15 0mitted from original plan due to building location P43-H4 11/15/2018 5 0mitted from original plan due to building location P43-H7 Omitted from original plan due to building location P43-H8 11/15/2018 5 0mitted from original plan due to building location P45-A1 11/15/2018 5 0mitted from original plan due to building location P45-A2 11/15/2018 5 0mitted from original plan due to building location P45-B3 11/15/2018 5 0mitted from original plan due to building location P45-B4 11/15/2018 5 0mitted from original plan due to building location P45-B4 11/15/2018 5 0mitted from original plan due to building location P45-B4 11/15/2018 5 0mitted from original plan due to building location P45-B4 11/15/2018 5 0mitted from original plan due to building location P45-B4 11/15/2018 5 0mitted from original plan due to building location	P43-G6	11/13/2018	15		2.5	
P-43-H1	P43-G7	11/13/2018	5		0	
P-43-H1	P43-G8	11/13/2018	15		0.2	
P-43-H2						
P-43-H3						
P-43-H6				in end of tube		
P-43-H6	P-43-H4			ŭ i		
P-43-H7	P-43-H5			ŭ i		
P-43-H8	P-43-H6			ž i		
P43-II	P-43-H7			Omitted from original plan due to builidng location		
P43-12	P-43-H8	11/13/2018	5		0.1	
P43-13 11/14/2018 5	P43-I1	11/16/2018	5		1.9	
P43-14 Omitted from original plan due to builiding location P43-15 Omitted from original plan due to builiding location P43-16 Omitted from original plan due to builiding location P43-17 Omitted from original plan due to builiding location P43-18 11/13/2018 15 1.3 P45-A1 11/15/2018 5 4.9 P45-A2 11/15/2018 5 5 2.1 P45-A3 11/15/2018 5 Slight odor .2'9' 2 P45-A4 11/15/2018 5 5 1.1 P45-A5 11/15/2018 5 Slight odor .2' - 2.3'. Sample submited from 0 - 2.5' 1.8 P45-B2 11/15/2018 5 9.9 P45-B3 11/15/2018 5 Silight odor .2' - 2.3'. Sample submited from 0 - 2.5' 3.6 P45-B4 11/15/2018 5 Slight odor .2'8' 0.9 P45-B5 11/15/2018 5 Slight odor .2'8' 0.5 P45-C1 11/15/2018 5 Slight odor .2'6' 0.5 P45-C3 11/14/2018 5 Slight odor .2'6' 0.5 P45-C4 11/15/2018 5 Slight odor .2'6' 0.5 P45-C5 11/15/2018 5 Omitted from original plan due to builiding location	P43-I2	11/14/2018	15		0.4	
P43-15	P43-I3	11/14/2018	5		0.4	
P43-16 Omitted from original plan due to builidng location P43-17 Omitted from original plan due to builidng location Parcel 45 Parcel 45 P45-A1 11/15/2018 5 4.9 P45-A2 11/15/2018 5 2.1 P45-A3 11/15/2018 5 Slight odor .2'9' 2 P45-A4 11/15/2018 5 1.1 P45-A5 11/15/2018 5 1.5 P45-B1 11/15/2018 5 Slight odor .2' - 2.3'. Sample submited from 0 - 2.5' 1.8 P45-B2 11/15/2018 5 Slight odor .2' - 2.3'. Sample submited from 0 - 2.5' 1.8 P45-B3 11/15/2018 5 0.9 P45-B4 11/15/2018 5 0.9 P45-B5 11/15/2018 5 Slight odor .2'8' 0.8 P45-C2 11/15/2018 5 Slight odor .2'8' 0.5 P45-C3 11/14/2018 5 Slight odor .2'6' 0.5 P45-C4 11/15/2018 5 </td <td>P43-I4</td> <td></td> <td></td> <td>Omitted from original plan due to builidng location</td> <td></td>	P43-I4			Omitted from original plan due to builidng location		
P43-I7 Omitted from original plan due to builiding location P43-I8 11/13/2018 1.3 Parcel 45 P45-A1 11/15/2018 5 4.9 P45-A2 11/15/2018 5 Slight odor .2'9' 2 P45-A3 11/15/2018 5 Slight odor .2'9' 2 P45-A4 11/15/2018 5 Slight odor .2'9' 2 P45-B1 11/15/2018 5 Slight odor .2'9' 2 P45-B2 11/15/2018 5 Slight odor .2' - 2.3'. Sample submited from 0 - 2.5' 1.8 P45-B3 11/14/2018 5 Sample submited from 0 - 2.5' 3.6 P45-B3 11/15/2018 5 Slight odor .2'8' 0.9 P45-C3 <th col<="" td=""><td>P43-I5</td><td></td><td></td><td>Omitted from original plan due to builidng location</td><td></td></th>	<td>P43-I5</td> <td></td> <td></td> <td>Omitted from original plan due to builidng location</td> <td></td>	P43-I5			Omitted from original plan due to builidng location	
P43-18 11/13/2018 15 Parcel 45 P45-A1 11/15/2018 5 945-A2 11/15/2018 5 Slight odor .2'9' 2 P45-A3 11/15/2018 5 Slight odor .2'9' 2 P45-A4 11/15/2018 5 1.1 P45-A5 11/15/2018 5 Slight odor .2' - 2.3'. Sample submited from 0 - 2.5' 1.8 P45-B1 11/15/2018 5 Slight odor .2' - 2.3'. Sample submited from 0 - 2.5' 1.8 P45-B2 11/15/2018 5 Smple submited from 0 - 2.5' 1.8 P45-B3 11/14/2018 5 Sample submited from 0 - 2.5' 3.6 P45-B4 11/15/2018 5 Slight odor .2'8' 0.8 P45-C1 11/15/2018 5 Slight odor .2'6' 0.5 P45-C2 11/15/2018 5 Slight odor .2'6' 0.5 P45-C3 11/14/2018 5 Slight odor .2'6' 0.5 <t< td=""><td>P43-I6</td><td></td><td></td><td>Omitted from original plan due to builidng location</td><td></td></t<>	P43-I6			Omitted from original plan due to builidng location		
Parcel 45 P45-A1 11/15/2018 5 4.9 P45-A2 11/15/2018 5 2.1 P45-A3 11/15/2018 5 Slight odor .2'9' 2 P45-A4 11/15/2018 5 1.1 P45-A5 11/15/2018 5 1.5 P45-B1 11/15/2018 5 Slight odor .2' - 2.3'. Sample submited from 0 - 2.5' 1.8 P45-B2 11/15/2018 5 Slight odor .2' - 2.3'. Sample submited from 0 - 2.5' 1.8 P45-B3 11/15/2018 5 4.7 P45-B4 11/15/2018 5 3.6 P45-B5 11/15/2018 5 Sample submited from 0 - 2.5' 3.6 P45-C1 11/15/2018 5 Slight odor .2'8' 0.8 P45-C2 11/15/2018 5 Slight odor .2'6' 0.5 P45-C3 11/14/2018 5 Slight odor .2'6' 0.5 P45-C4 11/15/2018 5 Slight odor .2'6' 0.5 P45-C5 11/15	P43-I7			Omitted from original plan due to builidng location		
P45-A1 11/15/2018 5 4.9 P45-A2 11/15/2018 5 2.1 P45-A3 11/15/2018 5 Slight odor .2'9' 2 P45-A4 11/15/2018 5 1.1 P45-A5 11/15/2018 5 1.5 P45-B1 11/15/2018 5 Slight odor .2' - 2.3'. Sample submited from 0 - 2.5' 1.8 P45-B2 11/15/2018 5 0.9 P45-B3 11/14/2018 5 4.7 P45-B4 11/15/2018 5 Sample submited from 0 - 2.5' 3.6 P45-B5 11/15/2018 5 Slight odor .2'8' 0.8 P45-C1 11/15/2018 5 Slight odor .2'6' 0.5 P45-C3 11/15/2018 5 Slight odor .2'6' 0.5 P45-C4 11/15/2018 5 Slight odor .2'6' 0.5 P45-C5 11/15/2018 5 1.3 P45-C5 11/15/2018 5 0.0 D0mitted from original plan due to builiding location 1.3	P43-I8	11/13/2018	15		1.3	
P45-A2 11/15/2018 5 Slight odor .2'9' 2 P45-A3 11/15/2018 5 Slight odor .2'9' 2 P45-A4 11/15/2018 5 1.1 P45-A5 11/15/2018 5 1.5 P45-B1 11/15/2018 5 Slight odor .2' - 2.3'. Sample submited from 0 - 2.5' 1.8 P45-B2 11/15/2018 5 0.9 P45-B3 11/14/2018 5 4.7 P45-B4 11/15/2018 5 Sample submited from 0 - 2.5' 3.6 P45-B5 11/15/2018 5 Slight odor .2'8' 0.8 P45-C1 11/15/2018 5 Slight odor .2'6' 0.5 P45-C2 11/15/2018 5 Slight odor .2'6' 0.5 P45-C3 11/14/2018 5 Slight odor .2'6' 0.5 P45-C4 11/15/2018 5 1.3 P45-C5 11/15/2018 5 1.3 P45-C5 11/15/2018 5 0.0 D0 Omitted from original plan due to builiding location			•	Parcel 45		
P45-A3 11/15/2018 5 Slight odor .2'9' 2 P45-A4 11/15/2018 5 1.1 P45-A5 11/15/2018 5 1.5 P45-B1 11/15/2018 5 Slight odor .2' - 2.3'. Sample submited from 0 - 2.5' 1.8 P45-B2 11/15/2018 5 0.9 P45-B3 11/15/2018 5 4.7 P45-B4 11/15/2018 5 Sample submited from 0 - 2.5' 3.6 P45-B5 11/15/2018 5 Slight odor .2'8' 0.8 P45-C1 11/15/2018 5 Slight odor .2'6' 0.5 P45-C3 11/14/2018 5 Slight odor .2'6' 0.5 P45-C4 11/15/2018 5 Slight odor .2'6' 0.5 P45-C5 11/15/2018 5 1.3 P45-C5 11/15/2018 5 2.5 P45-D1 Omitted from original plan due to builiding location	P45-A1	11/15/2018	5		4.9	
P45-A4 11/15/2018 5 1.1 P45-A5 11/15/2018 5 1.5 P45-B1 11/15/2018 5 Slight odor .2' - 2.3'. Sample submited from 0 - 2.5' 1.8 P45-B2 11/15/2018 5 0.9 P45-B3 11/14/2018 5 4.7 P45-B4 11/15/2018 5 Sample submited from 0 - 2.5' 3.6 P45-B5 11/15/2018 5 Slight odor .2'8' 0.8 P45-C1 11/15/2018 5 Slight odor .2'6' 0.5 P45-C3 11/14/2018 5 Slight odor .2'6' 0.5 P45-C4 11/15/2018 5 Slight odor .2'6' 0.5 P45-C5 11/15/2018 5 1.3 P45-C5 11/15/2018 5 2.5 P45-D1 Omitted from original plan due to builidng location	P45-A2	11/15/2018	5		2.1	
P45-A4 11/15/2018 5 1.1 P45-A5 11/15/2018 5 1.5 P45-B1 11/15/2018 5 Slight odor .2' - 2.3'. Sample submited from 0 - 2.5' 1.8 P45-B2 11/15/2018 5 0.9 P45-B3 11/14/2018 5 4.7 P45-B4 11/15/2018 5 Sample submited from 0 - 2.5' 3.6 P45-B5 11/15/2018 5 Slight odor .2'8' 0.8 P45-C1 11/15/2018 5 Slight odor .2'6' 0.5 P45-C3 11/14/2018 5 Slight odor .2'6' 0.5 P45-C4 11/15/2018 5 Slight odor .2'6' 0.5 P45-C3 11/15/2018 5 Slight odor .2'6' 0.5 P45-C3 11/15/2018 5 1.3 P45-C5 11/15/2018 5 0.0 P45-C5 11/15/2018 5 0.0 P45-D1 Omitted from original plan due to builidng location	P45-A3	11/15/2018	5	Slight odor .2'9'	2	
P45-B1 11/15/2018 5 Slight odor .2' - 2.3'. Sample submited from 0 - 2.5' 1.8 P45-B2 11/15/2018 5 0.9 P45-B3 11/14/2018 5 4.7 P45-B4 11/15/2018 5 0.9 P45-B5 11/15/2018 5 Sample submited from 0 - 2.5' 3.6 P45-C1 11/15/2018 5 Slight odor .2'8' 0.8 P45-C2 11/15/2018 5 Slight odor .2'6' 0.5 P45-C3 11/14/2018 5 4.6 P45-C4 11/15/2018 5 4.6 P45-C5 11/15/2018 5 1.3 P45-D1 Omitted from original plan due to building location 5	P45-A4	11/15/2018	5		1.1	
P45-B2 11/15/2018 5 P45-B3 11/14/2018 5 P45-B4 11/15/2018 5 P45-B5 11/15/2018 5 Sample submited from 0 - 2.5' 3.6 P45-C1 11/15/2018 5 Slight odor .2'8' 0.8 P45-C2 11/15/2018 5 P45-C3 11/14/2018 5 P45-C4 11/15/2018 5 P45-C5 11/15/2018 5 P45-D1 Omitted from original plan due to builiding location	P45-A5	11/15/2018	5		1.5	
P45-B2 11/15/2018 5 P45-B3 11/14/2018 5 P45-B4 11/15/2018 5 P45-B5 11/15/2018 5 Sample submited from 0 - 2.5' 3.6 P45-C1 11/15/2018 5 Slight odor .2'8' 0.8 P45-C2 11/15/2018 5 P45-C3 11/14/2018 5 P45-C4 11/15/2018 5 P45-C5 11/15/2018 5 P45-D1 Omitted from original plan due to builiding location	P45-B1	11/15/2018	5	Slight odor .2' - 2.3'. Sample submited from 0 - 2.5'	1.8	
P45-B4 11/15/2018 5 0.9 P45-B5 11/15/2018 5 Sample submited from 0 - 2.5' 3.6 P45-C1 11/15/2018 5 Slight odor .2'8' 0.8 P45-C2 11/15/2018 5 Slight odor .2'6' 0.5 P45-C3 11/14/2018 5 4.6 P45-C4 11/15/2018 5 1.3 P45-C5 11/15/2018 5 2.5 P45-D1 Omitted from original plan due to builiding location	P45-B2	11/15/2018	5		0.9	
P45-B5 11/15/2018 5 Sample submited from 0 - 2.5' 3.6 P45-C1 11/15/2018 5 Slight odor .2'8' 0.8 P45-C2 11/15/2018 5 Slight odor .2'6' 0.5 P45-C3 11/14/2018 5 4.6 P45-C4 11/15/2018 5 1.3 P45-C5 11/15/2018 5 2.5 P45-D1 Omitted from original plan due to builiding location	P45-B3	11/14/2018	5		4.7	
P45-C1 11/15/2018 5 Slight odor .2'8' 0.8 P45-C2 11/15/2018 5 Slight odor .2'6' 0.5 P45-C3 11/14/2018 5 4.6 P45-C4 11/15/2018 5 1.3 P45-C5 11/15/2018 5 2.5 P45-D1 Omitted from original plan due to builiding location	P45-B4	11/15/2018	5		0.9	
P45-C1 11/15/2018 5 Slight odor .2'8' 0.8 P45-C2 11/15/2018 5 Slight odor .2'6' 0.5 P45-C3 11/14/2018 5 4.6 P45-C4 11/15/2018 5 1.3 P45-C5 11/15/2018 5 2.5 P45-D1 Omitted from original plan due to builiding location	P45-B5	11/15/2018	5	Sample submited from 0 - 2.5'	3.6	
P45-C2 11/15/2018 5 Slight odor .2'6' 0.5 P45-C3 11/14/2018 5 4.6 P45-C4 11/15/2018 5 1.3 P45-C5 11/15/2018 5 2.5 P45-D1 Omitted from original plan due to building location	P45-C1	11/15/2018	5	Slight odor .2'8'	0.8	
P45-C4 11/15/2018 5 1.3 P45-C5 11/15/2018 5 2.5 P45-D1 Omitted from original plan due to building location	P45-C2	11/15/2018	5	i · ·	0.5	
P45-C511/15/201852.5P45-D1Omitted from original plan due to builidng location	P45-C3	11/14/2018	5		4.6	
P45-D1 Omitted from original plan due to builidng location	P45-C4	11/15/2018	5		1.3	
	P45-C5	11/15/2018	5		2.5	
P45-D2 11/15/2018 5 1.3	P45-D1			Omitted from original plan due to builidng location		
	P45-D2	11/15/2018	5		1.3	
P45-D3 11/14/2018 5 8.2	P45-D3	11/14/2018	5		8.2	
P45-D4 11/14/2018 5 12.8	P45-D4	11/14/2018	5		12.8	

Table 1. Soil Boring Summary Planned Marshall University Baseball Stadium Site Huntingon, Cabell County, West Virginia

Soil Boring ID	Date Drilled	Depth	Notes	Highest PID Reading (ppm-v/v)
P45-D5	11/14/2018	4.5		11.3
P45-E1			Omitted from original plan due to builidng location	
P45-E2			Omitted from original plan due to builidng location	
P45-E3			Omitted from original plan due to builidng location	
P45-E4			Omitted from original plan due to builidng location	
P45-E5			Omitted from original plan due to builidng location	
	Building 9	(Western	Building) - Note - Soil borings labeled as "B1" due to field error in building identification	
B1-B1	11/15/2018	15	Sample submitted from 2.5' to 4.2' bgs interval. Slight odor from 3' - 3.5'	23.6
B1-B2	11/15/2018	15		0.5
B1-B3			Omitted due to time constraints	
B1-B4			Omitted due to time constraints	
B1-B5	11/15/2018	15	Slight odor from 1.5' - 3'	2.1
	Building	1 (Eastern	Building)- Note - Soil borings labeled as "B9" due to field error in builidng identification	
B9-B1			Omitted due to time constraints	
B9-B2	11/15/2018	4.5	Refusal at 4.5' (brick fragments in end of tube) sample submitted from 0 to 2.5' bgs interval. Slight odor from 0.2' - 2.5'	5.4
B9-B3	11/15/2018	15		0.4
B9-B4			Omitted due to time constraints	
B9-B5	11/15/2018	4.5	Refusal at 4.5' (concrete fragments in end of tube)	0.4

Notes:

Bold - Sample submitted for laboratory analysis

Table 2. Soil Analytical Results Planned Marshall University Baseball Stadium Site Huntingon, Cabell County, West Virginia

Analyte	CAS	Residential RSL ¹	Industrial RSL ¹	Natural Background ²			Parcel 43 Surface	Soil	Parcel 43 S	Subsurface Soil	Parcel 4	Parcel 45 Surface Soil	
					B9 B2 (0-2.5)	P43 A2 (0-3)	P43 B6 (0-2)	P43 E3 (0-2.5)	P43 F2 (0-2.4)	(B1 B1 (2.5-4.2)	P43 D7 (5-7.5)	P45 B1 (0-2.5)	P45 B5 (0-2.5)
						T. 1. (1) . O							
2.70	5 0.00.0	25000	100000	.	0.010.5		anic Compounds (V		1 0.02	1 0.0204	0.025	1 0.00	0.0156
2-Butanone	78-93-3	27000	190000	NE	<0.0196	<0.0158	<0.016	<0.018	<0.02	0.0394	<0.026	<0.02	<0.0156
Acetone	67-64-1	61000	670000	NE	<0.0196	0.0415	0.0703	<0.018	<0.02	0.115	<0.026	<0.02	<0.0156
Benzene	71-43-2	1.2	5.1	NE	<0.00196	<0.00158	<0.0016	<0.0018	<0.002	<0.00172	<0.0026	<0.002	0.00189(J)
Carbon disulfide	75-15-0	770	3500	NE	< 0.0098	< 0.0079	<0.008	<0.009	<0.01	0.0267	<0.013	<0.01	< 0.0078
p-Isopropyltoluene	99-87-6	NE	NE	NE	<0.00196	<0.00158	< 0.0016	0.0209	< 0.002	< 0.00172	<0.0026	<0.002	<0.00156
Toluene	108-88-3	4900	47000	NE	< 0.00196	< 0.00158	< 0.0016	< 0.0018	< 0.002	< 0.00172	< 0.0026	< 0.002	0.00176(J)
							rganic Compounds	`					
Acenaphthene	83-32-9	3600	45000	NE	0.00199(J)	0.0263	0.00399	0.0116	0.0176	0.00333	0.0136	0.0299	0.00532
Acenaphthylene ³	208-96-8	4200	80000	NE	0.00364	0.0166	< 0.000698	0.00232(J)	0.00398	< 0.000698	< 0.000699	< 0.000699	< 0.000698
Anthracene	120-12-7	18000	230000	NE	0.00298	0.0199	0.00466	0.0116	0.0276	0.00266(J)	0.00599	0.0136	0.0130
Benzo(a)anthracene	56-55-3	1.1	21	NE	0.0325	0.0359	0.0496	0.0773	0.108	0.0462	0.0746	0.134	0.0502
Benzo(a)pyrene	50-32-8	0.11	2.1	NE	0.0139	0.0259	0.0402	0.0757	0.0890	0.0393	0.0829	0.130	0.0183
Benzo(b)fluoranthene	205-99-2	1.1	21	NE	0.0248	0.0313	0.0469	0.0757	0.0853	0.0486	0.0842	0.142	0.0256
Benzo(g,h,i)perylene ³	191-24-2	1800	33000	NE	0.0123	0.0183	0.0236	0.0571	0.0568	0.0230	0.0579	0.115	0.00931
Benzo(k)fluoranthene	207-08-9	11	210	NE	0.0106	0.0103	0.0153	0.0272	0.0289	0.0183	0.0403	0.0489	0.00931
Chrysene	218-01-9	110	2100	NE	0.0368	0.0276	0.0339	0.0478	0.0641	0.0329	0.0503	0.0955	0.0329
Dibenzo(a,h)anthracene	53-70-3	0.11	2.1	NE	0.00364	0.00532	0.00632	0.0123	0.0126	0.00532	0.00965	0.0210	0.00266
Fluoranthene	206-44-0	2400	30000	NE	0.0444	0.0522	0.0552	0.0634	0.127	0.0413	0.0699	0.140	0.150
Fluorene	86-73-7	2400	30000	NE	0.00199(J)	0.0519	< 0.000698	0.00299(J)	0.0116	0.00166(J)	0.00266(J)	0.00432	0.00299(J)
Indeno(1,2,3-cd)pyrene	193-39-5	1.1	21	NE	0.0139	0.0236	0.0356	0.0780	0.0784	0.0303	0.0762	0.154	0.0150
Naphthalene	91-20-3	3.8	17	NE	< 0.000695	0.0941	0.00599	0.00531	0.0120	0.0106	< 0.000699	0.00233(J)	0.00233(J)
Phenanthrene ³	85-01-8	23000	700000	NE	0.0424	0.259	0.0236	0.0236	0.0850	0.0186	0.0210	0.0536	0.120
Pyrene	129-00-0	1800	23000	NE	0.0533	0.0399	0.0446	0.0544	0.103	0.0383	0.0679	0.131	0.0991
					Re	esource Conservatio	n and Reovery Act (RCRA) Metals					
Arsenic	Total	0.68	3	17.9	11.2	6.6	6.2	3.5(J)	4.2(J)	7.1	2.5(J)	5.4	5.0(J)
Barium	Total	15000	220000	500	79.6	390	8900	1830	5470	6250	41.1	972	1210
Chromium	Total	120000	1800000	70	12.2(J)	12.4(J)	12.9(J)	19.3(J)	38.9	17.6(J)	5.4(J)	11.2(J)	11.5(J)
Lead	Total	400	800	20	17.6(J)	34.2(J)	49.2	76.1	58.2	31.8(J)	<10.0	19.6(J)	22.7(J)
Selenium	Total	390	5800	0.8	<1.0	<1.0	<1.0	<1.0	1.3(J)	<1.0	<1.0	<1.0	<1.0
Silver	Total	390	5800	NE	<1.0	<1.0	<1.0	4.4(J)	9.2	<1.0	<1.0	<1.0	<1.0
						Polychlori	nated Biphenyls (PC						
Aroclor 1242	53469-21-9	0.23	0.95	NE	< 0.00832	16.6	2.37	8.75	3.41	< 0.00831	< 0.00828	< 0.00831	0.817

^{1.} United States Environmental Protection Agency Regional Screening Levels, Revised November 2018

Yellow highlight - Analyte detected exceeding Residential RSL

Orange highlight - Analyte detected exceeding Industrial RSL

^{2.} Natural background levels of inorganics in soil in West Virginia from Table 2-3, West Virginia Voluntary Remediation and Redevelopment Act Guidance Manual

^{3.} No USEPA RSL established for Acenaphthylene, Benzo(g,h,i) perylene, or Phenanthrene - West Virginia Voluntary Remediation Program Risk Based Screening Levels (*italics*) used concentration comparison for those analytes Bold - Analyte detected

APPENDIX E



Pace Analytical Services, LLC 5 Weatheridge Dr.

Hurricane, WV 25526 Phone 304 757 8954

Fax: 304.757.9676 www.pacelabs.com

CASE NARRATIVE

CASE NARRATIVE	
Date: DEC 0 4 2018	
CLIENT: Potesta & Associates, Inc.	
Lab Number(s) 1805924-01 to 10	
Pace Analytical Services LLC warrants the accuracy of analysis for the data ge and reported in this report. Procedures used by the laboratory are well docume reviewed on a regular basis to ensure consistency and reliability. Sources for the analytical procedures are derived from EPA sources such as EPA-600/4-79-02 and the 20 th through 22 nd Editions of Standard Methods.	ented and ne
Samples were received in good condition unless otherwise noted.	
This report includes a total of <u>45</u> pages. This includes:	
Case Narrative Results for analyses reported by Pace Analytical Service 34 Results for analyses that were subcontracted Chain of Custody form and associated documents Other:	es WV retated ated and \$11,916,
The estimated uncertainty of measurement is available upon client request.	

Respectfully Submitted,

Mukesh Shah, General Manager

Results reviewed by:



5 Weatheridge Dr. Hurricane, WV 25526

Phone: 304.757.8954 Fax: 304.757.9676 www.pacelabs.com

14

LABORATORY ANALYSIS REPORT

Potesta & Associates, Inc.
7012 MacCorkle Ave. SE
Charleston, WV 25304
Attn: David Corsaro
Potesta - HMDA Flint Parcels 43 & 45
B1 B1 (2.5-4.2)
0101-18-0317-001
HMDA Flint Parcels 43 &45

Laboratory Number: Sample Identification Sampled By: Date/Time Sampled Date/Time Received Sample Type Client Information Site Code

1805924-01 B1 B1 (2.5-4.2) Client 11/15/2018 17:00 11/16/2018 00:00 GRAB

PARAMETER	RESULT	NOTE	MDL	PQL	UNITS	METHOD	DATE OF ANALYSIS	TIME OF ANALYSIS	ANALYST
Metals by SW846 60	000/7000 Serie	es Meth	ods				15		
Arsenic	7.1		1.0	5.0	mg/Kg	SW846 6010B	11/28/2018	9:11	CW
Barium	6250		5.0	20.0	mg/Kg	SW846 6010B	11/28/2018	10:01	cw
Cadmium	<1.0		1.0	5.0	mg/Kg	SW846 6010B	11/28/2018	9:11	cw
Chromium at the	17.6	J	5.0	20.0	mg/Kg	SW846 6010B	11/28/2018	9:11	CW
Lead	31.8	J	10.0	40.0	mg/Kg	SW846 6010B	11/28/2018	9:11	cw
Mercury	<0.8	QM-07	8.0	2.0	mg/Kg	SW8467471B	11/28/2018	9:14	CW
Selenium	<1.0		1.0	5.0	mg/Kg	SW846 6010B	11/28/2018	9:11	cw
Silver	<1.0		1.0	5.0	mg/Kg	SW846 6010B	11/28/2018	9:11	cw
								8.00	

NOTES

J QM-07 Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag). The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

Method Reference: USEPA: Methods for Chemical Analysis of Water and Waste. SM: Standard Methods for the Examination of Water and Wastewater. SW: Test Methods for Evaluating Solid Waste.

Respectfully Submitted:

Mukesh Shah

DEC 0 4 2018

Page 1 of 9



5 Weatheridge Dr. Hurricane, WV 25526

Phone: 304.757.8954 Fax: 304.757.9676 www.pacelabs.com

LABORATORY ANALYSIS REPORT

Potesta & Associates, Inc.
7012 MacCorkle Ave. SE
Charleston, WV 25304
Attn: David Corsaro
Potesta - HMDA Flint Parcels 43 & 45
B9 B2 (0-2.5)
0101-18-0317-001
HMDA Flint Parcels 43 &45

Laboratory Number: Sample Identification Sampled By: Date/Time Sampled Date/Time Received Sample Type Client Information Site Code 1805924-02 B9 B2 (0-2.5) Client 11/15/2018 17:00 11/16/2018 00:00 GRAB

DADAMETED	DEGULT	NOTE	***	201			DATE OF	TIME OF	911
PARAMETER	RESULT	NOTE	MDL	PQL	UNITS	METHOD	ANALYSIS	ANALYSIS	ANALYST
Metals by SW846 6	3000/7000 Serie	es Metho	ods						
Arsenic	11.2		1.0	5.0	mg/Kg	SW846 6010B	11/28/2018	9:15	CW
Barium	79.6		5.0	20.0	mg/Kg	SW846 6010B	11/28/2018	9:15	CW
Cadmium	<1.0		1.0	5.0	mg/Kg	SW846 6010B	11/28/2018	9:15	CW
Chromium	12.2	J	5.0	20.0	mg/Kg	SW846 6010B	11/28/2018	9:15	CW
Lead	17.6	J	10.0	40.0	mg/Kg	SW846 6010B	11/28/2018	9:15	CW
Mercury	<0.8		0.8	2.0	mg/Kg	SW8467471B	11/28/2018	9:14	CW
Selenium	<1.0		1.0	5.0	mg/Kg	SW846 6010B	11/28/2018	9:15	CW
Silver	<1.0		1.0	5.0	mg/Kg	SW846 6010B	11/28/2018	9:15	CW
							*	THREOF	
NOTES							3	APAUZSIS	ANALYST

Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).

Method Reference: USEPA: Methods for Chemical Analysis of Water and Waste. SM: Standard Methods for the Examination of Water and Wastewater. SW: Test Methods for Evaluating Solid Waste.

Respectfully Submitted:

Mukesh Shah

DEC 0 4 7018



5 Weatheridge Dr. Hurricane, WV 25526 Phone: 304.757.8954 Fax: 304.757.9676

www.pacelabs.com

S ACM SIS MILLYST

1111

2.12

900

LABORATORY ANALYSIS REPORT

Potesta & Associates, Inc.
7012 MacCorkle Ave. SE
Charleston, WV 25304
Attn: David Corsaro
Potesta - HMDA Flint Parcels 43 & 45
P42 A2 (0-3)
0101-18-0317-001
HMDA Flint Parcels 43 &45

NOTES ?

Laboratory Number: Sample Identification Sampled By: Date/Time Sampled Date/Time Received Sample Type Client Information Site Code 1805924-03 P42 A2 (0-3) Client 11/16/2018 12:30 11/16/2018 00:00 GRAB

PARAMETER	RESULT	NOTE	MDL	PQL	UNITS	METHOD	DATE OF ANALYSIS	TIME OF ANALYSIS	ANALYST
Metals by SW846 60	00/7000 Serie	s Metho	ods						
Arsenic	6.6		1.0	5.0	mg/Kg	SW846 6010B	11/28/2018	9:17	CW
Barium	390		5.0	20.0	mg/Kg	SW846 6010B	11/28/2018	9:41	cw
Cadmium	<1.0		1.0	5.0	mg/Kg	SW846 6010B	11/28/2018	9:17	cw
Chromium	12.4	J	5.0	20.0	mg/Kg	SW846 6010B	11/28/2018	9:17	CW
Lead	34.2	J	10.0	40.0	mg/Kg	SW846 6010B	11/28/2018	9:17	CW
Mercury	<0.8		8.0	2.0	mg/Kg	SW8467471B	11/28/2018	9:14	cw
Selenium	<1.0		1.0	5.0	mg/Kg	SW846 6010B	11/28/2018	9:17	CW
Silver	<1.0		1.0	5.0	mg/Kg	SW846 6010B	11/28/2018	9:17	CW
								. 15	

Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).

Method Reference: USEPA: Methods for Chemical Analysis of Water and Waste. SM: Standard Methods for the Examination of Water and Wastewater.

SW: Test Methods for Evaluating Solid Waste.

Mukesh Shah

Respectfully Submitted:

DEC 0 4 2018

Page 3 of 9



5 Weatheridge Dr. Hurricane, WV 25526

Phone 304 757 8954 Fax 304 757 9676

www.pacelabs.com

'815 42

CW

9: 8

10 13

9.48

9.18

8

3

LABORATORY ANALYSIS REPORT

Potesta & Associates, Inc.
7012 MacCorkle Ave. SE
Charleston, WV 25304
Attn: David Corsaro
Potesta - HMDA Flint Parcels 43 & 45
P43 B6 (0-2)
0101-18-0317-001
HMDA Flint Parcels 43 &45

Laboratory Number: Sample Identification Sampled By: Date/Time Sampled Date/Time Received Sample Type Client Information Site Code

1805924-04 P43 B6 (0-2) Client 11/13/2018 16:00 11/16/2018 00:00 GRAB

PARAMETER	RESULT	NOTE	MDL	PQL	UNITS	METHOD	DATE OF ANALYSIS	TIME OF ANALYSIS	ANALYST
Metals by SW846 60	00/7000 Serie	s Meth	ods						
Arsenic	6.2		1.0	5.0	mg/Kg	SW846 6010B	11/28/2018	9:18	CW
Barium (1 & As ena	8900		5.0	20.0	mg/Kg	SW846 6010B	11/28/2018	10:03	cw
Cadmium	<1.0		1.0	5.0	mg/Kg	SW846 6010B	11/28/2018	9:18	cw
Chromium	12.9	J	5.0	20.0	mg/Kg	SW846 6010B	11/28/2018	9:18	cw
Lead	49.2		10.0	40.0	mg/Kg	SW846 6010B	11/28/2018	9:18	cw
Mercury	<0.8		0.8	2.0	mg/Kg	SW8467471B	11/28/2018	9:14	cw
Selenium	<1.0		1.0	5.0	mg/Kg	SW846 6010B	11/28/2018	9:18	cw
Silver	<1.0		1.0	5.0	mg/Kg	SW846 6010B	11/28/2018	9:18	CW
								2.55	

NOTES

Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).

Method Reference: USEPA: Methods for Chemical Analysis of Water and Waste. SM: Standard Methods for the Examination of Water and Wastewater. SW: Test Methods for Evaluating Solid Waste.

Respectfully Submitted:

Mokesh Shah

DEC 0 4 2018

Page 4 of 9



5 Weatheridge Dr. Hurricane, WV 25526 Phone, 304,757,8954

Fax: 304.757.9676 www.pacelabs.com

LABORATORY ANALYSIS REPORT

Potesta & Associates, Inc.
7012 MacCorkle Ave. SE
Charleston, WV 25304
Attn: David Corsaro
Potesta - HMDA Flint Parcels 43 & 45
P43 D7 (5-7.5)
0101-18-0317-001
HMDA Flint Parcels 43 &45

J

Laboratory Number: Sample Identification Sampled By: Date/Time Sampled Date/Time Received Sample Type Client Information Site Code

1805924-05 P43 D7 (5-7.5) Client 11/13/2018 15:15 11/16/2018 00:00 GRAB

PARAMETER	RESULT	NOTE	MDL	PQL	UNITS	METHOD	DATE OF ANALYSIS	TIME OF ANALYSIS	ANALYST
Metals by SW846 60	00/7000 Serie	es Metho	ods						
Arsenic	2.5	J	1.0	5.0	mg/Kg	SW846 6010B	11/28/2018	9:21	CW
Barium	41.1		5.0	20.0	mg/Kg	SW846 6010B	11/28/2018	9:21	CW
Cadmium	<1.0		1.0	5.0	mg/Kg	SW846 6010B	11/28/2018	9:21	CW
Chromium 4	5.4	J	5.0	20.0	mg/Kg	SW846 6010B	11/28/2018	9:21	CW
Lead	<10.0		10.0	40.0	mg/Kg	SW846 6010B	11/28/2018	9:21	cw
Mercury	<0.8		8.0	2.0	mg/Kg	SW8467471B	11/28/2018	9:14	cw
Selenium	<1.0		1.0	5.0	mg/Kg	SW846 6010B	11/28/2018	9:21	cw
Silver	<1.0		1.0	5.0	mg/Kg	SW846 6010B	11/28/2018	9:21	CW
								35	
NOTES								115	

Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).

Method Reference: USEPA: Methods for Chemical Analysis of Water and Waste. SM: Standard Methods for the Examination of Water and Wastewater. SW: Test Methods for Evaluating Solid Waste.

Respectfully Submitted:

Mukesh Shah

DEC 0 4 2018

Page 5 of 9



5 Weatheridge Dr. Hurricane, WV 25526

Phone 304.757.8954 Fax: 304.757.9676 www.pacelabs.com

4

LABORATORY ANALYSIS REPORT

Potesta & Associates, Inc.
7012 MacCorkle Ave. SE
Charleston, WV 25304
Attn: David Corsaro
Potesta - HMDA Flint Parcels 43 & 45
P43 E3 (0-2.5)
0101-18-0317-001
HMDA Flint Parcels 43 &45

J

Laboratory Number: Sample Identification Sampled By: Date/Time Sampled Date/Time Received Sample Type Client Information Site Code 1805924-06 P43 E3 (0-2.5) Client 11/14/2018 17:00 11/16/2018 00:00 GRAB

PARAMETER	RESULT	NÔTE	MDL	PQL	UNITS	METHOD	DATE OF ANALYSIS	TIME OF ANALYSIS	ANALYST
Metals by SW846 60	00/7000 Serie	s Metho	ods						
Arsenic	3.5	J	1.0	5.0	mg/Kg	SW846 6010B	11/28/2018	9:23	CW
Barium	1830		5.0	20.0	mg/Kg	SW846 6010B	11/28/2018	10:04	CW
Cadmium	<1.0		1.0	5.0	mg/Kg	SW846 6010B	11/28/2018	9:23	CW
Chromium	19.3	J	5.0	20.0	mg/Kg	SW846 6010B	11/28/2018		CM
Lead	76.1		10.0	40.0	mg/Kg	SW846 6010B	11/28/2018	9:23	CW
Mercury	<0.8		8.0	2.0	mg/Kg	SW8467471B	11/28/2018	9:14	CW
Selenium	<1.0		1.0	5.0	mg/Kg	SW846 6010B	11/28/2018	9:23	CW
Silver	4.4	J	1.0	5.0	mg/Kg	SW846 6010B	11/28/2018	9:23	CW
							7	775-7-15	
NOTES							- 7	AL USE	TST ANA

Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).

Method Reference: USEPA: Methods for Chemical Analysis of Water and Waste. SM: Standard Methods for the Examination of Water and Wastewater. SW: Test Methods for Evaluating Solid Waste.

Respectfully Submitted:

Mukesh Shah

DEC 0 4 2018

Page 6 of 9



5 Weatheridge Dr. Hurricane, WV 25526 Phone: 304.757.8954 Fax: 304.757.9676 www.pacelabs.com

LABORATORY ANALYSIS REPORT

Potesta & Associates, Inc.
7012 MacCorkle Ave. SE
Charleston, WV 25304
Attn: David Corsaro
Potesta - HMDA Flint Parcels 43 & 45
P43 F2 (0-2.4)
0101-18-0317-001
HMDA Flint Parcels 43 &45

Laboratory Number: Sample Identification Sampled By: Date/Time Sampled Date/Time Received Sample Type Client Information Site Code

1805924-07 P43 F2 (0-2.4) Client 11/14/2018 17:30 11/16/2018 00:00 GRAB

							DATE OF	TIME OF	
PARAMETER	RESULT	NOTE	MDL	PQL	UNITS	METHOD	ANALYSIS	ANALYSIS	ANALYST
Metals by SW846 60	000/7000 Serie	s Metho	ods						
Arsenic	4.2	J	1.0	5.0	mg/Kg	SW846 6010B	11/28/2018	9:24	CW
Barium	5470		5.0	20.0	mg/Kg	SW846 6010B	11/28/2018	10:06	cw
Cadmium	<1.0		1.0	5.0	mg/Kg	SW846 6010B	11/28/2018	9:24	cw
Chromium	38.9		5.0	20.0	mg/Kg	SW846 6010B	11/28/2018	9:24	cw
Lead	58.2		10.0	40.0	mg/Kg	SW846 6010B	11/28/2018	9:24	cw
Mercury	<0.8		0.8	2.0	mg/Kg	SW8467471B	11/28/2018	9:14	cw
Selenium	1.3	J	1.0	5.0	mg/Kg	SW846 6010B	11/28/2018	9:24	CW
Silver	9.2		1.0	5.0	mg/Kg	SW846 6010B	11/28/2018	9:24	cw
								2.6	
PA NOTES							Ċ	ALALYSIS	ANALYST

Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).

Method Reference: USEPA: Methods for Chemical Analysis of Water and Waste. SM: Standard Methods for the Examination of Water and Wastewater. SW: Test Methods for Evaluating Solid Waste.

Respectfully Submitted:

Mukesh Shah

DEC 0 4 2018 Page 7 of 9



5 Weatheridge Dr. Hurricane, WV 25526 Phone: 304.757.8954 Fax: 304.757.9676

www.pacelabs.com

2511

LABORATORY ANALYSIS REPORT

Potesta & Associates, Inc.
7012 MacCorkle Ave. SE
Charleston, WV 25304
Attn: David Corsaro
Potesta - HMDA Flint Parcels 43 & 45
P45 B1 (0-2.5)
0101-18-0317-001
HMDA Flint Parcels 43 &45

J

Laboratory Number: Sample Identification Sampled By: Date/Time Sampled Date/Time Received Sample Type Client Information Site Code

1805924-08 P45 B1 (0-2.5) Client 11/15/2018 17:00 11/16/2018 00:00 GRAB

PARAMETER	RESULT	NOTE	MDL	PQL	UNITS	METHOD	DATE OF ANALYSIS	TIME OF ANALYSIS	ANALYST
Metals by SW846 60	00/7000 Serie	s Metho	ods						
Arsenic	5.4		1.0	5.0	mg/Kg	SW846 6010B	11/28/2018	9:26	CW
Barium 8 A	972		5.0	20.0	mg/Kg	SW846 6010B	11/28/2018	10:08	CW
Cadmium	<1.0		1.0	5.0	mg/Kg	SW846 6010B	11/28/2018	9:26	CW
Chromium	11.2	J	5.0	20.0	mg/Kg	SW846 6010B	11/28/2018	9:26	CW
Lead	19.6	J	10.0	40.0	mg/Kg	SW846 6010B	11/28/2018	9:26	CW
Mercury	<0.8		8.0	2.0	mg/Kg	SW8467471B	11/28/2018	9:14	CW
Selenium	<1.0		1.0	5.0	mg/Kg	SW846 6010B	11/28/2018	9:26	CW
Silver	<1.0		1.0	5.0	mg/Kg	SW846 6010B	11/28/2018	9:26	CW
NOTES								UK-	3
								215	8 A 1

Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).

Method Reference: USEPA: Methods for Chemical Analysis of Water and Waste. SM: Standard Methods for the Examination of Water and Wastewater. SW: Test Methods for Evaluating Solid Waste.

Respectfully Submitted:

Mukesh Shah

DEC 0 4 2018 Page 8 of 9



5 Weatheridge Dr. Hurricane, WV 25526

Phone: 304.757.8954 Fax: 304.757.9676 www.pacelabs.com

M

OW.

" 11

B

9.30

LABORATORY ANALYSIS REPORT

Potesta & Associates, Inc.
7012 MacCorkle Ave. SE
Charleston, WV 25304
Attn: David Corsaro
Potesta - HMDA Flint Parcels 43 & 45
P45 B5 (0-2.5)
0101-18-0317-001
HMDA Flint Parcels 43 &45

Laboratory Number: Sample Identification Sampled By: Date/Time Sampled Date/Time Received Sample Type Client Information Site Code

1805924-09 P45 B5 (0-2.5) Client 11/15/2018 17:00 11/16/2018 00:00 GRAB

PARAMETER	RESULT	NOTE	MDL	PQL	UNITS	METHOD	DATE OF ANALYSIS	TIME OF ANALYSIS	ANALYST
Metals by SW846 60	00/7000 Serie	s Metho	ods						
Arsenic	5.0	J	1.0	5.0	mg/Kg	SW846 6010B	11/28/2018	9:33	CW
Barium	1210		5.0	20.0	mg/Kg	SW846 6010B	11/28/2018	10:09	CW
Cadmium	<1.0		1.0	5.0	mg/Kg	SW846 6010B	11/28/2018	9:33	CW
Chromium	11.5	J	5.0	20.0	mg/Kg	SW846 6010B	11/28/2018	9:33	CW
Lead	22.7	j	10.0	40.0	mg/Kg	SW846 6010B	11/28/2018	9:33	cw
Mercury	<0.8		0.8	2.0	mg/Kg	SW8467471B	11/28/2018	9:14	cw
Selenium	<1.0		1.0	5.0	mg/Kg	SW846 6010B	11/28/2018	9:33	cw
Silver	<1.0		1.0	5.0	mg/Kg	SW846 6010B	11/28/2018	9:33	cw
								100	

NOTES

Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).

Method Reference: USEPA: Methods for Chemical Analysis of Water and Waste. SM: Standard Methods for the Examination of Water and Wastewater. SW: Test Methods for Evaluating Solid Waste.

Respectfully Submitted:

Mukesh Shah

DEC 0 4 2018

Page 9 of 9



Pace Analytical Services PO Box 286 Beaver, WV 25813 TEL: (304) 255-2500 Website: www.reiclabs.com

782 North Lee Highway Lexington, VA 24450 TEL: 540.464.1880 16 Commerce Drive Westover, WV 26501 TEL: 304.241.5861

Tuesday, December 04, 2018

Brian Richards
PACE ANALYTICAL SERVICES LLC-WV
5 WEATHERIDGE DRIVE
HURRICANE, WV 25526

TEL:

FAX:

RE: 0101-18-0317-001 Work Order #: 18112453

Dear Brian Richards:

Pace Analytical Services received 10 sample(s) on 11/19/2018 for the analyses presented in the following report.

Sincerely,

Billy Shirley

Project Manager (304) 250-6214



Pace Analytical Services - Case Narrative

WO#: 18112453

Date Reported: 12/4/2018

Original

Client:

PACE ANALYTICAL SERVICES LLC-WV

Project:

0101-18-0317-001

The analytical results presented in this report were produced using documented laboratory SOPs that incorporate appropriate quality control procedures as described in the applicable methods. Verification of required sample preservation (as required) is recorded on associated laboratory logs. Any deviation from compliance or method modification is identified within the body of this report by a qualifier footnote which is defined at the bottom of this page.

All sample results for solid samples are reported on an "as-received" wet weight basis unless otherwise noted.

Results reported for sums of individual parameters, such as TTHM and HAA5, may vary slightly from the sum of the Individual parameter results, due to rounding of individual results, as required by EPA.

The test results in this report meet all NELAP and/or VELAP requirements for parameters clearly designated as PA, VA, PAVA, or VELAP in the column labeled NELAP.

Please note if the sample collection time is not provided on the Chain of Custody, the default recording will be 0:00:00. This may cause some tests to be apparently analyzed out of hold.

All tests performed by the Lexington and Morgantown Service Centers are designated by an annotation on the test code. All other tests were performed by Pace Analytical Services, LLC Laboratory in Beaver, WV. Subcontracted results are attached to the end of the report.

This report may not be reproduced, except in full, without the written approval of Pace Analytical Services, LLC.

All samples are stored for a minimum of 14 days after the date of the final report. All records are stored for a minimum of 5 years. If tonger sample or records retention is required, please contact your project manager for details.

DEFINITIONS:

MCL: Maximum Contaminant Level

MDL: Method Detection Limit; The lowest concentration of analyte that can be detected by the method in the applicable matrix. Mg/Kg or mg/L: Units of part per million (PPM) - milligram per Kilogram (weight/weight) or milligram per Liter (weight/volume).

NA: Not Applicable

ND: Not Detected at the PQL or MDL

PQL: Practical Quantitation Limit; The lowest verified limit to which data is quantified without qualifications. Analyte concentrations below PQL are reported either as ND or as a number with a "J" qualifier.

Qual: Qualifier that applies to the analyte reported.

TIC: Tentatively Identified Compound, Estimated Concentration denoted by "J" qualifier.

Ug/Kg or ug/L: Units of part per billion (PPB) - microgram per kilogram (weight/weight) or microgram per liter (weight/volume).

QUALIFIERS:

- X: Reported value exceeds required MCL
- B: Analyte detected in the associated Method Blank at a concentration > 1/2 the PQL
- E: Analyte concentration reported that exceeds the upper calibration standard. Greater uncertainty is associated with this result and data should be considered estimated.
- H: Holding time for preparation or analysis has been exceeded.
- J: Analyte concentration is reported, and is less than the PQL and greater than or equal to the MDL. The result reported is an estimate.
- S: % REC (% recovery) exceeds control limits

CERTIFICATIONS:

Beaver, WV: WVDHHR 00412CM, WVDEP 060, VADCLS 00281, KYDEP 90039, NCDWQ 466, PADEP 68-00839, VADCLS(VELAP) 460148 Bioassay (Beaver, WV): WVDEP 060, VADCLS(VELAP) 460148, PADEP 68-00839

Lexington, VA: VADCLS(VELAP) 460150

Morgantown, WV: WVDHHR 003112M, WVDEP 387

Pace Analytical Services - Analytical Report

WO#: 18112453

Date Reported: 12/4/2018

Original

Client:

PACE ANALYTICAL SERVICES LLC-WV

Collection Date:

11/15/2018 5:00:00 PM

Project:

0101-18-0317-001

Date Received:

11/19/2018

Lab ID:

18112453-01A

Matrix:

Solid

Client Sample ID:

1805924-01 (B1 B1 (2.5-4.2))

Site ID:

WV

Analysis	Result	MDL	PQL	MCL	Qual	Units	Date Analyzed NE	LAP
PERCENT MOISTURE			Method:	SM2540	B-1997	7	Analyst: DF	
Percent Moisture	23	NA	1.0	NA		wt%	11/20/2018 1:57 PM	
PCBS			Method:	SW8082	2A		Analyst: NC	
Aroclor 1016	ND	0.00831	0.0166	NA		mg/Kg	11/26/2018 4:58 PM	VA
Aroclor 1221	ND	0.00831	0.0166	NA		mg/Kg	11/26/2018 4:58 PM	VA
Aroclor 1232	ND	0.00831	0.0166	NA		mg/Kg	11/26/2018 4:58 PM	VA
Aroclor 1242	ND	0.00831	0.0166	NA		mg/Kg	11/26/2018 4:58 PM	VA
Aroclor 1248	ND	0.00831	0.0166	NA		mg/Kg	11/26/2018 4:58 PM	VA
Aroclor 1254	ND	0.00831	0.0166	NA		mg/Kg	11/26/2018 4:58 PM	VA
Aroclor 1260	ND	0.00831	0.0166	NA		mg/Kg	11/26/2018 4:58 PM	VA
Surr: Tetrachloro-m-xylene	42.9	NA	25.6-130	NA		%Rec	11/26/2018 4:58 PM	

Notes:

The ending CCV for Aroclors 1016 & 1260 exceeds laboratory control limits, indicating a high bias. Since the analytes were not detected in the sample, the reported results are not affected by this bias.

POLYNUCLEAR AROMATIC HYDROCARBONS (SIM)			Method: SW8270D SIM			Analyst: CLS			
Anthracene	0.00266	0.000699	0.00329	NA	J	mg/Kg	11/27/2018 5:50 PM	PAVA	
Acenaphthene	0.00333	0.000699	0.00329	NA		mg/Kg	11/27/2018 5:50 PM	PAVA	
Acenaphthylene	ND	0.000699	0.00329	NA		mg/Kg	11/27/2018 5:50 PM	PAVA	
Benzo(a)anthracene	0.0462	0.000699	0.00329	NA		mg/Kg	11/27/2018 5:50 PM	PAVA	
Benzo(a)pyrene	0.0393	0.000699	0.00329	NA		mg/Kg	11/27/2018 5:50 PM	PAVA	
Benzo(b)fluoranthene	0.0486	0.000699	0.00329	NA		mg/Kg	11/27/2018 5:50 PM	PAVA	
Benzo(g,h,i)perylene	0.0230	0.000699	0.00329	NA		mg/Kg	11/27/2018 5:50 PM	PAVA	
Benzo(k)fluoranthene	0.0183	0.000699	0.00329	NA		mg/Kg	11/27/2018 5:50 PM	PAVA	
Chrysene	0.0329	0.000699	0.00329	NA		mg/Kg	11/27/2018 5:50 PM	PAVA	
Dibenzo(a,h)anthracene	0.00532	0.000699	0.00329	NA		mg/Kg	11/27/2018 5:50 PM	PA/VA	
Fluoranthene	0.0413	0.000699	0.00329	NA		mg/Kg	11/27/2018 5:50 PM	PAVA	
Fluorene	0.00166	0.000699	0.00329	NA	J	mg/Kg	11/27/2018 5:50 PM	PAVA	
Indeno(1,2,3-cd)pyrene	0.0303	0.000699	0.00329	NA		mg/Kg	11/27/2018 5:50 PM	PAVA	
Naphthalene	0.0106	0.000699	0.00329	NA		mg/Kg	11/27/2018 5:50 PM	PAVA	
Phenanthrene	0.0186	0.000699	0.00329	NA		mg/Kg	11/27/2018 5:50 PM	PA/VA	
Pyrene	0.0383	0.000699	0.00329	NA		mg/Kg	11/27/2018 5:50 PM	PAVA	
Surr: Nitrobenzene-d5	120	NA	23.3-150	NA		%Rec	11/27/2018 5:50 PM		
Surr: 2-Fluorobiphenyl	66.7	NA	40.1-121	NA		%Rec	11/27/2018 5:50 PM		

Pace Analytical Services - Analytical Report

WO#: 18112453

Date Reported: 12/4/2018

Original

Client:

PACE ANALYTICAL SERVICES LLC-WV

Project: Lab ID:

0101-18-0317-001

Client Sample ID:

18112453-01A

1805924-01 (B1 B1 (2.5-4.2))

Collection Date:

11/15/2018 5:00:00 PM

Date Received:

11/19/2018

Matrix: Site ID:

Solid WV

Analysis	Result	MDL	PQL	MCL	Qual	Units	Date Analyzed NELAP
Surr: 4-Terphenyl-d14	72.7	NA	24.9-124	NA		%Rec	11/27/2018 5:50 PM

Notes:

Matrix spike recoveries were not within laboratory control limits due to matrix interference. Acceptable LCS recovery indicates the analysis was in control.

VOLATILE ORGANIC COMPOUNDS-8260			Method: S	W8260B		Analyst: TKC			
Acetone	115	17.2	34.4	NA	μg/Kg	11/27/2018 6:44 PM	PAVA		
Acrolein	ND	17.2	34.4	NA	μg/Kg	11/27/2018 6:44 PM	PAVA		
Acrylonitrile	ND	17.2	34.4	NA	μg/Kg	11/27/2018 6:44 PM	PA/VA		
Benzene	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PAVA		
Bromobenzene	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PAVA		
Bromochloromethane	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PAVA		
Bromodichloromethane	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PAVA		
Bromoform	ND	1.72	3.44	NA	µg/Kg	11/27/2018 6:44 PM	PA/VA		
Bromomethane	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PA/VA		
2-Butanone	39.4	17.2	34.4	NA	μg/Kg	11/27/2018 6:44 PM	PAVA		
n-Butylbenzene	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PAVA		
sec-Butylbenzene	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PAVA		
tert-Butylbenzene	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PAVA		
Carbon disulfide	26.7	8.60	17.2	NA	μg/Kg	11/27/2018 6:44 PM	PAVA		
Carbon tetrachloride	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PAVA		
Chlorobenzene	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PA/VA		
Chloroethane	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PAVA		
Chloroform	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PAVA		
Chloromethane	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PA/VA		
2-Chlorotoluene	ND	1.72	3.44	NA	µg/Кg	11/27/2018 6:44 PM	PAVA		
4-Chlorotoluene	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PAVA		
Dibromochloromethane	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PAVA		
DBCP	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PAVA		
1,2-Dibromoethane	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PAVA		
Dibromomethane	ND	1.72	3.44	NA	µg/Kg	11/27/2018 6:44 PM	PAVA		
1,2-Dichlorobenzene	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PAVA		
1,3-Dichlorobenzene	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PAVA		
1,4-Dichlorobenzene	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PAVA		
Dichlorodifluoromethane	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PAVA		
1,1-Dichloroethane	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PAVA		

Pace Analytical Services - Analytical Report

WO#: 18112453

Date Reported: 12/4/2018

Original

Client:

PACE ANALYTICAL SERVICES LLC-WV

Project: Lab ID:

0101-18-0317-001

Client Sample ID:

18112453-01A

1805924-01 (B1 B1 (2.5-4.2))

Collection Date:

11/15/2018 5:00:00 PM

Date Received: Matrix:

11/19/2018 Solid

Site ID:

WV

Analysis	Result	MDL	PQL	MCL	Qual Units	Date Analyzed N	ELAP
1,2-Dichloroethane	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PAVA
1,1-Dichloroethene	ND	1.72	3.44	NA	µg/Кg	11/27/2018 6:44 PM	PAVA
cis-1,2-Dichloroethene	ND	1.72	3.44	NA	µg/Кg	11/27/2018 6:44 PM	PAVA
trans-1,2-Dichloroethene	ND	1.72	3.44	NA	µg/Кg	11/27/2018 6:44 PM	PAVA
1,2-Dichloropropane	ND	1.72	3.44	NA	µg/Кg	11/27/2018 6:44 PM	PAVA
1,3-Dichloropropane	ND	1.72	3.44	NA	рд/Кд	11/27/2018 6:44 PM	PA/VA
2,2-Dichloropropane	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PAVA
1,1-Dichloropropene	ND	1.72	3.44	NA	µg/Кg	11/27/2018 6:44 PM	PA/VA
cis-1,3-Dichloropropene	ND	1.72	3.44	NA	µg/Кg	11/27/2018 6:44 PM	PAVA
trans-1,3-Dichtoropropene	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PAVA
Ethylbenzene	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PAVA
Hexachlorobutadiene	ND	1.72	3.44	NA	µg/Кg	11/27/2018 6:44 PM	PA/VA
2-Hexanone	ND	17.2	34.4	NA	μg/Kg	11/27/2018 6:44 PM	PA/VA
lodomethane	ND	17.2	34.4	NA	μg/Kg	11/27/2018 6:44 PM	PAVA
Isopropylbenzene	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PA/VA
p-Isopropylloluene	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PAVA
Methylene chloride	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PAVA
4-Methyl-2-pentanone	ND	17.2	34.4	NA	µg/Kg	11/27/2018 6:44 PM	PAVA
MTBE	ND	8.60	17.2	NA	μg/Kg	11/27/2018 6:44 PM	PA/VA
n-Propylbenzene	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PAVA
Styrene	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PAVA
1,1,1,2-Tetrachloroethane	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PAVA
1,1,2,2-Tetrachloroethane	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PAVA
Tetrachloroethene	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PAVA
Toluene	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PAVA
1,2,3-Trichlorobenzene	ND	1.72	3.44	NA	μg/Кg	11/27/2018 6:44 PM	PAVA
1,2,4-Trichlorobenzene	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PAVA
1,1,1-Trichloroethane	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PAVA
1,1,2-Trichloroethane	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PAVA
Trichloroethene	ND	1.72	3.44	NA	µg/Кд	11/27/2018 6:44 PM	PAVA
Trichlorofluoromethane	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PAVA
1,2,3-Trichloropropane	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PAVA
1,2,4-Trimethylbenzene	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PAVA
1,3,5-Trimethylbenzene	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PAVA
Vinyl acetate	ND	17.2	34.4	NA	μg/Kg	11/27/2018 6:44 PM	PAVA
Vinyl chloride	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	PAVA
o-Xylene	ND	1.72	3.44	NA	μg/Kg	11/27/2018 6:44 PM	
m,p-Xylene	ND	3.44	6.88	NA	μg/Kg	11/27/2018 6:44 PM	

WO#: 18112453

Date Reported: 12/4/2018

Original

Client:

PACE ANALYTICAL SERVICES LLC-WV

Project:

0101-18-0317-001

Lab ID:

18112453-01A

Client Sample ID:

1805924-01 (B1 B1 (2.5-4.2))

Collection Date:

11/15/2018 5:00:00 PM

Date Received:

11/19/2018

Matrix:

Solid

Site ID:

Analysis	F	Result	MDL	PQL	MCL	Qual	Units	Date Analyzed NELAP
Surr: 1,2-Dichloroethane-d4		96.6	NA	65-124	NA		%Rec	11/27/2018 6:44 PM
Surr: 4-Bromofluorobenzene		109	NA	75.8-128	NA		%Rec	11/27/2018 6:44 PM
Surr: Dibromofluoromethane		100	NA	74.1-126	NA		%Rec	11/27/2018 6:44 PM
Surr: Toluene-d8		87.9	NA	77.3-130	NA		%Rec	11/27/2018 6:44 PM

WO#: 18112453

Date Reported: 12/4/2018

Original

Client: Project:

PACE ANALYTICAL SERVICES LLC-WV

0101-18-0317-001

Lab ID:

18112453-02A

Client Sample ID: 1805924-02 (B9 B2 (0-2.5))

Collection Date:

11/15/2018 5:00:00 PM

Date Received: Matrix:

11/19/2018

Site ID:

Solid WV

Analysis	Result	MDL	PQL	MCL	Qual	Units	Date Analyzed NE	LAP
PERCENT MOISTURE			Method:	SM2540	B-199	7	Analyst: DF	
Percent Moisture	8.0	NA	1.0	NA		wt%	11/20/2018 1:57 PM	
PCBS			Method:	SW8082	2A		Analyst: NC	
Aroclor 1016	ND	0.00832	0.0166	NA		mg/Kg	11/26/2018 5:12 PM	VA
Aroclor 1221	ND	0.00832	0.0166	NA		mg/Kg	11/26/2018 5:12 PM	VA
Aroclor 1232	ND	0.00832	0.0166	NA		mg/Kg	11/26/2018 5:12 PM	VA
Aroclor 1242	ND	0.00832	0.0166	NA		mg/Kg	11/26/2018 5:12 PM	VA
Aroctor 1248	ND	0.00832	0.0166	NA		mg/Kg	11/26/2018 5:12 PM	VA
Aroclor 1254	ND	0.00832	0.0166	NA		mg/Kg	11/26/2018 5:12 PM	VA
Aroclor 1260	ND	0.00832	0.0166	NA		mg/Kg	11/26/2018 5:12 PM	VA
Surr: Tetrachtoro-m-xylene	156	NA	25.6-130	NA	S	%Rec	11/26/2018 5:12 PM	

Notes:

The ending CCV for Aroclors 1016 & 1260 exceeds laboratory control limits, indicating a high bias. Since the analytes were not detected in the sample, the reported results are not affected by this bias.

POLYNUCLEAR AROMATIC HYE (SIM)	ROCARB	ONS	Method: \$	SW8270	D SIM		Analyst: CLS	
Anthracene	0.00298	0.000696	0.00328	NA	J	mg/Kg	11/27/2018 10:35 PM	PAVA
Acenaphthene	0.00199	0.000696	0.00328	NA	J	mg/Kg	11/27/2018 10:35 PM	PAVA
Acenaphthylene	0.00364	0.000696	0.00328	NA		mg/Kg	11/27/2018 10:35 PM	PAVA
Benzo(a)anthracene	0.0325	0.000696	0.00328	NA		mg/Kg	11/27/2018 10:35 PM	PAVA
Benzo(a)pyrene	0.0139	0.000696	0.00328	NA		mg/Kg	11/27/2018 10:35 PM	PAVA
Benzo(b)fluoranthene	0.0248	0.000696	0.00328	NA		mg/Kg	11/27/2018 10:35 PM	PA/VA
Benzo(g,h,i)perylene	0.0123	0.000696	0.00328	NA		mg/Kg	11/27/2018 10:35 PM	PAVA
Benzo(k)fluoranthene	0.0106	0.000696	0.00328	NA		mg/Kg	11/27/2018 10:35 PM	PAVA
Chrysene	0.0368	0.000696	0.00328	NA		mg/Kg	11/27/2018 10:35 PM	PAVA
Dibenzo(a,h)anthracene	0.00364	0.000696	0.00328	NA		mg/Kg	11/27/2018 10:35 PM	PAVA
Fluoranthene	0.0444	0.000696	0.00328	NA		mg/Kg	11/27/2018 10:35 PM	PAVA
Fluorene	0.00199	0.000696	0.00328	NA	J	mg/Kg	11/27/2018 10:35 PM	PAVA
Indeno(1,2,3-cd)pyrene	0.0139	0.000696	0.00328	NA		mg/Kg	11/27/2018 10:35 PM	PAVA
Naphthalene	ND	0.000696	0.00328	NA		mg/Kg	11/27/2018 10:35 PM	PAVA
Phenanthrene	0.0424	0.000696	0.00328	NA		mg/Kg	11/27/2018 10:35 PM	PAVA
Pyrene	0.0533	0.000696	0.00328	NA		mg/Kg	11/27/2018 10:35 PM	PAVA
Surr: Nitrobenzene-d5	112	NA	23.3-150	NA		%Rec	11/27/2018 10:35 PM	
Surr: 2-Fluorobiphenyl	71.7	NA	40.1-121	NA		%Rec	11/27/2018 10:35 PM	
Surr: 4-Terphenyl-d14	71.7	NA	24.9-124	NA		%Rec	11/27/2018 10:35 PM	

WO#: 18112453

Date Reported: 12/4/2018

12/4/2018 Original

Client:

PACE ANALYTICAL SERVICES LLC-WV

Project:

0101-18-0317-001

Lab ID: Client Sample ID: 18112453-02A

1805924-02 (B9 B2 (0-2.5))

Collection Date:

11/15/2018 5:00:00 PM

Date Received:

11/19/2018

Matrix:

Solid

Site ID:

Analysis	Result	MDL	PQL	MCL	Qual	Units	Date Analyzed N	IELAP
VOLATILE ORGANIC COMPOU	NDS-8260		Method:	SW8260	В		Analyst: TKC	
Acetone	ND	19.6	39.2	NA		µg/Kg	11/27/2018 7:18 PM	PAVA
Acrolein	ND	19.6	39.2	NA		μg/Kg	11/27/2018 7:18 PM	PAVA
Acrylonitrile	ND	19.6	39.2	NA		µg/Kg	11/27/2018 7:18 PM	PA/VA
Benzene	ND	1.96	3.92	NA		µg/Kg	11/27/2018 7:18 PM	PAVA
Bromobenzene	ND	1.96	3.92	NA		µg/Kg	11/27/2018 7:18 PM	PAVA
Bromochloromethane	ND	1.96	3.92	NA		µg/Kg	11/27/2018 7:18 PM	PAVA
Bromodichloromethane	ND	1.96	3.92	NA		µg/Kg	11/27/2018 7:18 PM	PAVA
Bromoform	ND	1.96	3.92	NA		μg/Kg	11/27/2018 7:18 PM	PA/VA
Bromomethane	ND	1.96	3.92	NA		μg/Kg	11/27/2018 7:18 PM	PAVA
2-Butanone	ND	19.6	39.2	NA		μg/Kg	11/27/2018 7:18 PM	PA/VA
n-Butylbenzene	ND	1.96	3.92	NA		μg/Kg	11/27/2018 7:18 PM	PAVA
sec-Butylbenzene	ND	1.96	3.92	NA		μg/Kg	11/27/2018 7:18 PM	PAVA
tert-Butylbenzene	ND	1.96	3.92	NA		µg/Kg	11/27/2018 7:18 PM	PAVA
Carbon disulfide	ND	9.80	19.6	NA		μg/Kg	11/27/2018 7:18 PM	PAVA
Carbon tetrachloride	ND	1.96	3.92	NA		µg/Kg	11/27/2018 7:18 PM	PAVA
Chlorobenzene	ND	1.96	3.92	NA		µg/Kg	11/27/2018 7:18 PM	PAVA
Chloroethane	ND	1.96	3.92	NA		µg/Kg	11/27/2018 7:18 PM	PAVA
Chloroform	ND	1.96	3.92	NA		µg/Kg	11/27/2018 7:18 PM	PAVA
Chloromethane	ND	1.96	3.92	NA		μg/Kg	11/27/2018 7:18 PM	PAVA
2-Chlorotoluene	ND	1.96	3.92	NA		рд/Кд	11/27/2018 7:18 PM	PAVA
4-Chlorotoluene	ND	1.96	3.92	NA		µg/Кg	11/27/2018 7:18 PM	PAVA
Dibromochloromethane	ND	1.96	3.92	NA		μg/Kg	11/27/2018 7:18 PM	PA/VA
DBCP	ND	1.96	3.92	NA		µg/Kg	11/27/2018 7:18 PM	PA/VA
1,2-Dibromoethane	ND	1.96	3.92	NA		μg/Kg	11/27/2018 7:18 PM	PA/VA
Dibromomethane	ND	1.96	3.92	NA		μg/Kg	11/27/2018 7:18 PM	PA/VA
1,2-Dichtorobenzene	ND	1.96	3.92	NA		μg/Kg	11/27/2018 7:18 PM	PAVA
1,3-Dichlorobenzene	ND	1.96	3.92	NA		μg/Kg	11/27/2018 7:18 PM	PAVA
1,4-Dichlorobenzene	ND	1.96	3.92	NA		μg/Kg	11/27/2018 7:18 PM	PAVA
Dichlorodifluoromethane	NĐ	1.96	3.92	NA		µg/Kg	11/27/2018 7:18 PM	PAVA
1,1-Dichloroethane	ND	1.96	3.92	NA		µg/Kg	11/27/2018 7:18 PM	PAVA
1,2-Dichloroethane	ND	1.96	3.92	NA		µg/Kg	11/27/2018 7:18 PM	PAVA
1,1-Dichloroethene	ND	1.96	3.92	NA		pg/Kg pg/Kg	11/27/2018 7:18 PM	PAVA
cis-1,2-Dichloroethene	ND	1.96	3.92	NA		hā\kā	11/27/2018 7:18 PM	PAVA
rans-1,2-Dichloroethene	ND	1.96	3.92	NA		µg/Kg	11/27/2018 7:18 PM	PAVA
1,2-Dichloropropane	ND	1.96	3.92	NA		μg/Kg	11/27/2018 7:18 PM	PAVA
1,3-Dichloropropane	ND	1.96	3.92	NA		µg/Kg µg/Kg	11/27/2018 7:18 PM	PAVA
2,2-Dichloropropane	ND	1.96	3.92	NA		µg/Kg µg/Kg	11/27/2018 7:18 PM	

WO#: 18112453

Date Reported: 12/4/2018

12/4/2018 Original

Client:

PACE ANALYTICAL SERVICES LLC-WV

Project: Lab ID: 0101-18-0317-001

Client Sample ID:

18112453-02A

1805924-02 (B9 B2 (0-2.5))

Collection Date:

11/15/2018 5:00:00 PM

Date Received:

11/19/2018

Matrix:

Solid

Site ID: WV

Analysis	Result	MDL	PQL	MCL	Qual Units	Date Analyzed NELAP
1,1-Dichloropropene	ND	1.96	3.92	NA	μg/Kg	11/27/2018 7:18 PM PAVA
cis-1,3-Dichloropropene	ND	1.96	3.92	NA	μg/Kg	11/27/2018 7:18 PM PA/VA
trans-1,3-Dichtoropropene	ND	1.96	3.92	NA	μg/Kg	11/27/2018 7:18 PM PA/VA
Ethylbenzene	ND	1.96	3.92	NA	μg/Kg	11/27/2018 7:18 PM PAVA
Hexachlorobutadiene	ND	1.96	3.92	NA	µg/Кg	11/27/2018 7:18 PM PAVA
2-Hexanone	ND	19.6	39.2	NA	μg/Kg	11/27/2018 7:18 PM PAVA
lodomethane	ND	19.6	39.2	NA	μg/Kg	11/27/2018 7:18 PM PAVA
Isopropylbenzene	ND	1.96	3.92	NA	μg/Kg	11/27/2018 7:18 PM PAVA
p-isopropyltoluene	ND	1.96	3.92	NA	µg/Kg	11/27/2018 7:18 PM PA/VA
Methylene chloride	ND	1.96	3.92	NA	µg/Kg	11/27/2018 7:18 PM PAVA
4-Methyl-2-pentanone	ND	19.6	39.2	NA	μg/Kg	11/27/2018 7:18 PM PA/VA
MTBE	ND	9.80	19.6	NA	µg/Кд	11/27/2018 7:18 PM PAVA
n-Propylbenzene	ND	1.96	3.92	NA	μg/Kg	11/27/2018 7:18 PM PAVA
Styrene	ND	1.96	3.92	NA	µg/Kg	11/27/2018 7:18 PM PAVA
1,1,1,2-Tetrachloroethane	ND	1.96	3.92	NA	µg/Kg	11/27/2018 7:18 PM PA/VA
1,1,2,2-Tetrachloroethane	NĐ	1.96	3.92	NA	µg/Kg	11/27/2018 7:18 PM PAVA
Tetrachloroethene	ND	1.96	3.92	NA	μg/Kg	11/27/2018 7:18 PM PA/VA
Toluene	ND	1.96	3.92	NA	μg/Kg	11/27/2018 7:18 PM PA/VA
1,2,3-Trichlorobenzene	ND	1.96	3.92	NA	µg/Kg	11/27/2018 7:18 PM PA/VA
1,2,4-Trichlorobenzene	ND	1.96	3.92	NA	µg/Kg	11/27/2018 7:18 PM PA/VA
1,1,1-Trichloroethane	ND	1.96	3.92	NA	µg/Кg	11/27/2018 7:18 PM PA/VA
1,1,2-Trichloroethane	ND	1.96	3.92	NA	μg/Kg	11/27/2018 7:18 PM PA/VA
Trichloroethene	ND	1.96	3.92	NA	μg/Kg	11/27/2018 7:18 PM PA/VA
Trichlorofluoromethane	ND	1.96	3.92	NA	μg/Kg	11/27/2018 7:18 PM PA/VA
1,2,3-Trichloropropane	ND	1.96	3.92	NA	μg/Kg	11/27/2018 7:18 PM PA/VA
1,2,4-Trimethylbenzene	ND	1.96	3.92	NA	μg/Kg	11/27/2018 7:18 PM PA/VA
1,3,5-Trimethylbenzene	ND	1.96	3.92	NA	μg/Kg	11/27/2018 7:18 PM PA/VA
Vinyl acetate	ND	19.6	39.2	NA	μg/Kg	11/27/2018 7:18 PM PAVA
Vinyl chloride	ND	1.96	3.92	NA	μg/Kg	11/27/2018 7:18 PM PAVA
o-Xylene	ND	1.96	3.92	NA	μg/Kg	11/27/2018 7:18 PM
m,p-Xylene	ND	3.92	7.84	NA	μg/Kg	11/27/2018 7:18 PM
Surr: 1,2-Dichloroethane-d4	98.4	NA	65-124	NA	%Rec	11/27/2018 7:18 PM
Surr: 4-Bromofluorobenzene	108	NA	75.8-128	NA	%Rec	11/27/2018 7:18 PM
Surr: Dibromofluoromethane	98.5	NA	74.1-126	NA	%Rec	11/27/2018 7:18 PM
Surr: Toluene-d8	92.0	NA	77.3-130	NA	%Rec	11/27/2018 7:18 PM

WO#: 18112453

Date Reported: 12/4/2018

Original

Client:

PACE ANALYTICAL SERVICES LLC-WV

Project: Lab ID:

0101-18-0317-001

18112453-03A

Client Sample ID:

1805924-03 ((P43 A2 (0-3))

Collection Date:

11/16/2018 12:30:00 PM 11/19/2018

Date Received: Matrix:

Solid

Site ID:

WV

Analysis	Result	MDL	PQL	MCL	Qual	Units	Date Analyzed NE	LAP
PERCENT MOISTURE			Method:	SM2540	B-199	7	Analyst: DF	
Percent Moisture	17	NA	1.0	NA		wt%	11/20/2018 1:57 PM	
PCBS			Method:	SW8082	! A		Analyst: NC	
Aroclor 1016	ND	0.00833	0.0167	NA		mg/Kg	11/26/2018 5:26 PM	VA
Aroclor 1221	ND	0.00833	0.0167	NA		mg/Kg	11/26/2018 5:26 PM	VA
Araclor 1232	ND	0.00833	0.0167	NA		mg/Kg	11/26/2018 5:26 PM	VA
Aroclor 1242	16.6	0.0833	0.167	NA		mg/Kg	12/3/2018 9:04 AM	VA
Aroclor 1248	ND	0.00833	0.0167	NA		mg/Kg	11/26/2018 5:26 PM	VA
Araclor 1254	ND	0.00833	0.0167	NA		mg/Kg	11/26/2018 5:26 PM	VA
Aroclor 1260	ND	0.00833	0.0167	NA		mg/Kg	11/26/2018 5:26 PM	VA
Surr: Tetrachloro-m-xylene	137	NA	25.6-130	NA	S	%Rec	11/26/2018 5:26 PM	

Notes:

The ending CCV for Aroclors 1016 & 1260 exceeds laboratory control limits, indicating a high bias. Since the analytes were not detected in the sample, the reported results are not affected by this bias.

POLYNUCLEAR AROMATIC HY (SIM)	DROCARBONS	Method:	SW8270D SIM		Analyst: CLS	
Anthracene	0.0199 0.0006	98 0.00329	NA	mg/Kg	11/27/2018 10:59 PM	PAVA
Acenaphthene	0.0263 0.0006	98 0.00329	NA	mg/Kg	11/27/2018 10:59 PM	PAVA
Acenaphthylene	0.0166 0.0006	98 0.00329	NA	mg/Kg	11/27/2018 10:59 PM	PAVA
Benzo(a)anthracene	0.0359 0.0006	98 0.00329	NA	mg/Kg	11/27/2018 10:59 PM	PAVA
Benzo(a)pyrene	0.0259 0.0006	98 0.00329	NA	mg/Kg	11/27/2018 10:59 PM	PAVA
Benzo(b)fluoranthene	0.0313 0.0006	98 0.00329	NA	mg/Kg	11/27/2018 10:59 PM	PAVA
Benzo(g,h,i)perylene	0.0183 0.0006	98 0.00329	NA	mg/Kg	11/27/2018 10:59 PM	PAVA
Benzo(k)fluoranthene	0.0103 0.0006	98 0.00329	NA	mg/Kg	11/27/2018 10:59 PM	PAVA
Chrysene	0.0276 0.0006	98 0.00329	NA	mg/Kg	11/27/2018 10:59 PM	PAVA
Dibenzo(a,h)anthracene	0.00532 0.0006	98 0.00329	NA	mg/Kg	11/27/2018 10:59 PM	PAVA
Fluoranthene	0.0522 0.0006	98 0.00329	NA	mg/Kg	11/27/2018 10:59 PM	PAVA
Fluorene	0.0519 0.0006	98 0.00329	NA	mg/Kg	11/27/2018 10:59 PM	PAVA
Indeno(1,2,3-cd)pyrene	0.0236 0.0006	98 0.00329	NA	mg/Kg	11/27/2018 10:59 PM	PA/VA
Naphthalene	0.0941 0.0006	98 0.00329	NA	mg/Kg	11/27/2018 10:59 PM	PAVA
Phenanthrene	0.259 0.0069	0.0329	NA	mg/Kg	11/29/2018 4:14 PM	PAVA
Pyrene	0.0399 0.0006	98 0.00329	NA	mg/Kg	11/27/2018 10:59 PM	PAVA
Surr: Nitrobenzene-d5	120 NA	23.3-150	NA	%Rec	11/27/2018 10:59 PM	
Surr: 2-Fluorobiphenyl	60.6 NA	40.1-121	NA	%Rec	11/27/2018 10:59 PM	
Surr: 4-Terphenyl-d14	76.8 NA	24.9-124	NA	%Rec	11/27/2018 10:59 PM	

WO#: 18112453

Date Reported: 12/4/2018

Original

Client:

PACE ANALYTICAL SERVICES LLC-WV

Project:

0101-18-0317-001

Lab ID:

Client Sample ID:

18112453-03A

1805924-03 ((P43 A2 (0-3))

Collection Date:

11/16/2018 12:30:00 PM

Date Received:

11/19/2018

Matrix: Site ID: Solid WV

Benzane	Analysis	Result	MDL	PQL	MCL	Qual	Units	Date Analyzed N	IELAP
Acrolein ND 15.8 31.6 NA µg/Ng 11/27/2018 7:52 PM PAVA Acrylontirile ND 15.8 31.6 NA µg/Ng 11/27/2018 7:52 PM PAVA Benzene ND 1.58 31.6 NA µg/Ng 11/27/2018 7:52 PM PAVA Benzene ND 1.58 31.6 NA µg/Ng 11/27/2018 7:52 PM PAVA Bromochloromethane ND 1.58 31.6 NA µg/Ng 11/27/2018 7:52 PM PAVA Bromochloromethane ND 1.58 31.6 NA µg/Ng 11/27/2018 7:52 PM PAVA Bromochloromethane ND 1.58 31.6 NA µg/Ng 11/27/2018 7:52 PM PAVA Bromochloromethane ND 1.58 31.6 NA µg/Ng 11/27/2018 7:52 PM PAVA Bromochloromethane ND 1.58 31.6 NA µg/Ng 11/27/2018 7:52 PM PAVA Bromochloromethane ND 1.58 31.6 NA µg/Ng 11/27/2018 7:52 PM PAVA Bromochloromethane ND 1.58 31.6 NA µg/Ng 11/27/2018 7:52 PM PAVA Bromochloromethane ND 1.58 31.6 NA µg/Ng 11/27/2018 7:52 PM PAVA PAVA PASWA PA	VOLATILE ORGANIC COMPO	UNDS-8260		Method:	SW8260)B		Analyst: TKC	
Acrylonifidile ND 15.8 31.6 NA µg/Kg 11/27/2018 7:52 PM PAVA Benzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA Bromobanzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA Bromobanzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA Bromodichioromethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA Bromodichioromethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA Bromodichioromethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA Bromodichioromethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA Bromodichioromethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA Bromomethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA Bromodichioromethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA N-Bulylbenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA sec-Bulylbenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA Sec-Bulylbenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA Carbon distlifie ND 7.90 15.8 NA µg/Kg 11/27/2018 7:52 PM PAVA Carbon tetrachloride ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA Carbon tetrachloride ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA Chlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA Chlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA Chlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA Chlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA Chlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA Chlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA Chlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA Chlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA Chlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA Chlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA Chlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA Chlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA Chlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA Chlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA Chlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA 1.2-Dibromoethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA 1.2-	Acetone	41.5	15.8	31.6	NA		μg/Kg	11/27/2018 7:52 PM	PA/VA
Actylonidrile ND 15.8 31.6 NA μg/Kg 11/27/2018 7:52 PM PA/VA Benzane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA Bromochloromethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA Bromodlchloromethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA Bromodlchloromethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA Bromodlchloromethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 2-Butanone ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 2-Butanone ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 2-Butanone ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1-Butanone ND 1.58 <	Acrolein	ND	15.8	31.6	NA		µg/Kg	11/27/2018 7:52 PM	PAVA
Benzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA Bromobloromelhane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA Bromoclioromelhane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA Bromoclom ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA Bromomelhane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA Bromomelhane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA Bromomelhane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA Bromomelhane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA Aughtylbenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA Left-Bulydisenzene ND 1.58 3.16<	Acrylonitrile	ND	15.8	31.6	NA			11/27/2018 7:52 PM	PAVA
Bromochloromethane	Benzene	ND	1.58	3.16	NA		µg/Kg	11/27/2018 7:52 PM	PA/VA
Bromodichloromethane	Bromobenzene	ND	1.58	3.16	NA		µg/Kg	11/27/2018 7:52 PM	PAVA
Bromoform ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 2-Butanone ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 2-Butanone ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 2-Butanone ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1-Z-Butanone ND	Bromochloromethane	ND	1.58	3.16	NA			11/27/2018 7:52 PM	PAVA
Bromoform ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA	Bromodichloromethane	ND	1.58	3.16	NA		μg/Kg	11/27/2018 7:52 PM	PAVA
2-Butanone ND 15.8 31.6 NA µg/Kg 11/27/2018 7:52 PM PAVVA sec-Butylbenzene ND 1.58 31.6 NA µg/Kg 11/27/2018 7:52 PM PAVVA sec-Butylbenzene ND 1.58 31.6 NA µg/Kg 11/27/2018 7:52 PM PAVVA tent-Butylbenzene ND 1.58 31.6 NA µg/Kg 11/27/2018 7:52 PM PAVVA Lent-Butylbenzene ND 1.58 31.6 NA µg/Kg 11/27/2018 7:52 PM PAVVA Lent-Butylbenzene ND 1.58 31.6 NA µg/Kg 11/27/2018 7:52 PM PAVVA Carbon disuffide ND 7.90 15.8 NA µg/Kg 11/27/2018 7:52 PM PAVVA Carbon disuffide ND 1.58 31.6 NA µg/Kg 11/27/2018 7:52 PM PAVVA Chlorobenzene ND 1.58 31.6 NA µg/Kg 11/27/2018 7:52 PM PAVVA Chlorobenzene ND 1.58 31.6 NA µg/Kg 11/27/2018 7:52 PM PAVVA Chlorobenzene ND 1.58 31.6 NA µg/Kg 11/27/2018 7:52 PM PAVVA Chlorobenbane ND 1.58 31.6 NA µg/Kg 11/27/2018 7:52 PM PAVVA Chlorobeluene ND 1.58 31.6 NA µg/Kg 11/27/2018 7:52 PM PAVVA 4-Chlorotoluene ND 1.58 31.6 NA µg/Kg 11/27/2018 7:52 PM PAVVA 4-Chlorotoluene ND 1.58 31.6 NA µg/Kg 11/27/2018 7:52 PM PAVVA 4-Chlorotoluene ND 1.58 31.6 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,2-Dibromochloromethane ND 1.58 31.6 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,2-Dibromochloromethane ND 1.58 31.6 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,2-Dibromochloromethane ND 1.58 31.6 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,2-Dibromochlane ND 1.58 31.6 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,2-Dibromochlane ND 1.58 31.6 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,2-Dibromochlane ND 1.58 31.6 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,2-Dibromochlane ND 1.58 31.6 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,2-Dibromochlane ND 1.58 31.6 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,2-Dibromochlane ND 1.58 31.6 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,2-Dibromochlane ND 1.58 31.6 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,2-Dibromochlane ND 1.58 31.6 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,2-Dibromochlane ND 1.58 31.6 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,2-Dibromochlane ND 1.58 31.6 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,2-Dibromochlane ND 1.58 31.6 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,2-Dibromochlane ND 1.58 31.6 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,2-Dibromochlane ND 1.58 31.6 NA µg/Kg 11/27/2	Bromoform	ND	1.58	3.16	NA			11/27/2018 7:52 PM	PAVA
n-Butylbenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA tert-Butylbenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA tert-Butylbenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA tert-Butylbenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA Carbon disulfide ND 7.90 15.8 NA µg/Kg 11/27/2018 7:52 PM PAVVA Carbon disulfide ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA Chlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA Chlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA Chloroform ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA Chloroform ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA Chloroform ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA Chloroform ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA Chloroformethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA 4-Chlorofoluene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA 4-Chlorofoluene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA 4-Chlorofoluene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA 4-Chlorofoluene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA 4-Chlorofoluene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA 4-Chlorofoluene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA 4-Chlorofoluene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA 4-Chlorofoluene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,2-Dichlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,2-Dichlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,3-Dichlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,4-Dichlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,4-Dichlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,4-Dichlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,4-Dichlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,4-Dichlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,4-Dichlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,4-Dichlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,4-Dichlorobethene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,	Bromomethane	ND	1.58	3.16	NA		μg/Kg	11/27/2018 7:52 PM	PAVA
sec-Butylbenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA tert-Butylbenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA Carbon disulfide ND 7.90 15.8 NA µg/Kg 11/27/2018 7:52 PM PAVVA Carbon tetrachloride ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA Carbon tetrachloride ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA Chlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA Chlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA Chlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA Chlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA Chlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA 4-Chloroboluene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA 4-Chloroboluene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA 4-Chloroboluene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA 4-Chloroboluene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA 4-Chloroboluene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA 4-Chloroboluene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA 4-Chloroboluene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,2-Dibromoethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,2-Dibromoethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,2-Dibrlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,3-Dibrlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,1-Dibrlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,1-Dibrlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,1-Dibrlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,1-Dibrlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,1-Dibrlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,1-Dibrlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,1-Dibrlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,1-Dibrlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,1-Dibrlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,1-Dibrlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA 1,1-Dibrlorobenzene ND 1.58 3.16 NA µ	2-Bulanone	ND	15.8	31.6	NA		μg/Kg	11/27/2018 7:52 PM	PAVA
tert-Butylbenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVVA Carbon disulfide ND 7.90 15.8 NA µg/Kg 11/27/2018 7:52 PM PAVVA Carbon tetrachloride ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA Chlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA Chlorobelhane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA Chlorodolhane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA Chlorodoluene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA 4-Chlorotoluene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA 4-Chlorotoluene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA Dibromochloromethane ND 1.58	n-Butylbenzene	ND	1.58	3.16	NA			11/27/2018 7:52 PM	PAVA
Carbon disulfide ND 7.90 15.8 NA µg/kg 11/27/2018 7:52 PM PAVA Carbon tetrachloride ND 1.58 3.16 NA µg/kg 11/27/2018 7:52 PM PAVA Chlorobenzene ND 1.58 3.16 NA µg/kg 11/27/2018 7:52 PM PAVA Chloroethane ND 1.58 3.16 NA µg/kg 11/27/2018 7:52 PM PAVA Chloroform ND 1.58 3.16 NA µg/kg 11/27/2018 7:52 PM PAVA Chloroform ND 1.58 3.16 NA µg/kg 11/27/2018 7:52 PM PAVA Chloroform ND 1.58 3.16 NA µg/kg 11/27/2018 7:52 PM PAVA Chloroform ND 1.58 3.16 NA µg/kg 11/27/2018 7:52 PM PAVA Chlorofolulene ND 1.58 3.16 NA µg/kg 11/27/2018 7:52 PM PAVA Dibromochloromethane ND 1.58 3.16	sec-Butylbenzene	ND	1.58	3.16	NA			11/27/2018 7:52 PM	PAVA
Carbon disulfide ND 7.90 15.8 NA μg/kg 11/27/2018 7:52 PM PAVA Carbon tetrachloride ND 1.58 3.16 NA μg/kg 11/27/2018 7:52 PM PAVA Chlorobenzene ND 1.58 3.16 NA μg/kg 11/27/2018 7:52 PM PAVA Chlorocethane ND 1.58 3.16 NA μg/kg 11/27/2018 7:52 PM PAVA Chloroform ND 1.58 3.16 NA μg/kg 11/27/2018 7:52 PM PAVA Chlorodoluene ND 1.58 3.16 NA μg/kg 11/27/2018 7:52 PM PAVA 4-Chlorotoluene ND 1.58 3.16 NA μg/kg 11/27/2018 7:52 PM PAVA 4-Chlorotoluene ND 1.58 3.16 NA μg/kg 11/27/2018 7:52 PM PAVA 4-Chlorotoluene ND 1.58 3.16 NA μg/kg 11/27/2018 7:52 PM PAVA 4-Chlorotoluene ND 1.58 <td< td=""><td>tert-Butylbenzene</td><td>ND</td><td>1.58</td><td>3.16</td><td>NA</td><td></td><td>μg/Kg</td><td>11/27/2018 7:52 PM</td><td>PAVA</td></td<>	tert-Butylbenzene	ND	1.58	3.16	NA		μg/Kg	11/27/2018 7:52 PM	PAVA
Chlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA Chloroethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA Chloroform ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA Chloromethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA Chloromethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA 2-Chlorotoluene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA 4-Chlorotoluene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA 4-Chlorotoluene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA Dibromochloromethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA 1,2-Dibromoethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA Dibromomethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA 1,2-Dibromoethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA 1,2-Dichlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA 1,3-Dichlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA 1,4-Dichlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA 1,4-Dichlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA 1,1-Dichloroethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA 1,1-Dichloroethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA 1,1-Dichloroethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA 1,1-Dichloroethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA 1,1-Dichloroethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA 1,1-Dichloroethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA 1,1-Dichloroethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA 1,1-Dichloroethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA 1,1-Dichloroethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA 1,1-Dichloroethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA 1,1-Dichloroethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA 1,1-Dichloroethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA 1,1-Dichloroethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA 1,2-Dichloroethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA 1,3-Dichloroethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA	Carbon disulfide	ND	7.90	15.8	NA			11/27/2018 7:52 PM	PAVA
Chloroethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA Chloroform ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA Chloroform ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA Chloromethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 2-Chlorotoluene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 4-Chlorotoluene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 4-Chlorotoluene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 4-Chlorotoluene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1.2-Dibromocthoromethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1.2-Dibromocthane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1.2-Dibromocthane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1.2-Dichlorobenzene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1.3-Dichlorobenzene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1.3-Dichlorobenzene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1.3-Dichlorobenzene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1.4-Dichlorobenzene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1.4-Dichlorobenzene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1.1-Dichloroethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1.2-Dichloroethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1.2-Dichloroethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1.2-Dichloroethene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1.2-Dichloroethene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1.2-Dichloroethene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1.2-Dichloroethene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1.2-Dichloroethene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1.2-Dichloroethene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1.2-Dichloroethene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1.3-Dichloroethene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1.3-Dichloroethene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1.3-Dichloroethene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1.3-Dichloroethene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1.3-Dichloroethene ND 1.58 3	Carbon tetrachloride	ND	1.58	3.16	NA		µg/Kg	11/27/2018 7:52 PM	PAVA
Chloroform ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA Chloromethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 2-Chlorotoluene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 4-Chlorotoluene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 4-Chlorotoluene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA Dibromochloromethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA DBCP ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dibromoethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA Dibromomethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dichlorobenzene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,3-Dichlorobenzene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,4-Dichlorobenzene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,4-Dichlorobenzene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichlorodifluoromethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichlorodifluoromethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dichloroethene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,3-Dichloropopane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,3-Dichloropopane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA	Chlorobenzene	ND	1.58	3.16	NA			11/27/2018 7:52 PM	PAVA
Chloromethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 2-Chlorotoluene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 4-Chlorotoluene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 4-Chlorotoluene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA Dibromochloromethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dibromoethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dibromoethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dichlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,3-Dichlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,3-Dichlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,4-Dichlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,4-Dichlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dichloroethene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dichloroethene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dichloropropane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,3-Dichloropropane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,3-Dichloropropane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,3-Dichloropropane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA	Chloroethane	ND	1.58	3.16	NA		µg/Кg	11/27/2018 7:52 PM	PAVA
Chloromethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 2-Chlorotoluene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 4-Chlorotoluene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA Dibromochloromethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA DBCP ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dibromoethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dichlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,3-Dichlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,4-Dichlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethane ND <td< td=""><td>Chloroform</td><td>ND</td><td>1.58</td><td>3.16</td><td>NA</td><td></td><td>µg/Kg</td><td>11/27/2018 7:52 PM</td><td>PAVA</td></td<>	Chloroform	ND	1.58	3.16	NA		µg/Kg	11/27/2018 7:52 PM	PAVA
4-Chlorotoluene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA Dibromochloromethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA DBCP ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA 1,2-Dibromoethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA Dibromomethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA 1,2-Dichlorobenzene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA 1,3-Dichlorobenzene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA 1,4-Dichlorobenzene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA 1,4-Dichlorobenzene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA 1,1-Dichlorotethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA 1,1-Dichlorotethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA 1,2-Dichlorotethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA 1,1-Dichlorotethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA 1,1-Dichlorotethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA 1,1-Dichlorotethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA 1,1-Dichlorotethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA 1,1-Dichlorotethene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA 1,1-Dichlorotethene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA 1,1-Dichlorotethene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA 1,2-Dichlorotethene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA 1,2-Dichlorotethene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA 1,2-Dichlorotethene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA 1,3-Dichloropropane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA	Chloromethane	ND	1.58	3.16	NA			11/27/2018 7:52 PM	PAVA
Dibromochloromethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA DBCP ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA 1,2-Dibromoethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA Dibromomethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA 1,2-Dichlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA 1,3-Dichlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA 1,4-Dichlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA 1,4-Dichlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA Dichlorodifluoromethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA 1,1-Dichloroethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA 1,2-Dichloroethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA 1,2-Dichloroethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA 1,1-Dichloroethene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA 1,1-Dichloroethene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA 1,1-Dichloroethene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA 1,2-Dichloroethene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA 1,3-Dichloropropane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA 1,3-Dichloropropane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PAVA	2-Chlorotoluene	ND	1.58	3.16	NA		μg/Kg	11/27/2018 7:52 PM	PA/VA
Dibromochloromethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA DBCP ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dibromoethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA Dibromomethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dichlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,3-Dichlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,4-Dichlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethane ND	4-Chlorotoluene	ND	1.58	3.16	NA		µg/Кg	11/27/2018 7:52 PM	PA/VA
1,2-Dibromoethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA Dibromomethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dichlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,3-Dichlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,4-Dichlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,4-Dichlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dichloroethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dichloroethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dichloroethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dichloroethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dichloroethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dichloroethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dichloropropane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,3-Dichloropropane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,3-Dichloropropane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA	Dibromochloromethane	ND	1.58	3.16	NA			11/27/2018 7:52 PM	PAVA
Dibromomethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dichlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,3-Dichlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,4-Dichlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,4-Dichlorobenzene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dichloroethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dichloroethene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dichloroethene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dichloroethene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dichloroethene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dichloroethene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,3-Dichloropropane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,3-Dichloropropane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,3-Dichloropropane	DBCP	ND	1.58	3.16	NA		µg/Kg	11/27/2018 7:52 PM	PA/VA
Dibromomethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dichlorobenzene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,3-Dichlorobenzene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,4-Dichlorobenzene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA Dichlorodifluoromethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dichloroethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dichloroethene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dichloroethene	1,2-Dibromoethane	ND	1.58	3.16	NA		μg/Kg	11/27/2018 7:52 PM	PAVA
1,2-Dichlorobenzene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,3-Dichlorobenzene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,4-Dichlorobenzene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA Dichlorodifluoromethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dichloroethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dichloroethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA cis-1,2-Dichloroethene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA trans-1,2-Dichloroethene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dichloroethene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dichloropropane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,3-Dichloropropane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,3-Dichloropropane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA	Dibromomethane	ND	1.58	3.16	NA			11/27/2018 7:52 PM	PAVA
1,3-Dichlorobenzene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,4-Dichlorobenzene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA Dichlorodifluoromethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dichloroethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dichloroethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA cis-1,2-Dichloroethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA trans-1,2-Dichloroethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dichloropropane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,3-Dichloropropane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,3-Dichloropropane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA	1,2-Dichlorobenzene	ND	1.58	3.16	NA			11/27/2018 7:52 PM	PAVA
1,4-Dichlorobenzene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA Dichlorodifluoromethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dichloroethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dichloroethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA cis-1,2-Dichloroethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA trans-1,2-Dichloroethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dichloropropane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,3-Dichloropropane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,3-Dichloropropane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,3-Dichloropropane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA	1,3-Dichlorobenzene	ND	1.58	3.16	NA			11/27/2018 7:52 PM	PA/VA
Dichlorodifluoromethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA 1,1-Dichloroethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA 1,2-Dichloroethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA 1,1-Dichloroethene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA cis-1,2-Dichloroethene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA trans-1,2-Dichloroethene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA 1,2-Dichloropropane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA 1,3-Dichloropropane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA	1,4-Dichlorobenzene	ND	1.58	3.16	NA			11/27/2018 7:52 PM	PA/VA
1,1-Dichloroethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA 1,2-Dichloroethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA 1,1-Dichloroethene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA cis-1,2-Dichloroethene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA trans-1,2-Dichloroethene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA 1,2-Dichloropropane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA 1,3-Dichloropropane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA 1,3-Dichloropropane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA 1,3-Dichloropropane	Dichlorodifluoromethane	ND	1.58	3.16	NA			11/27/2018 7:52 PM	PAVA
1,2-Dichloroethane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,1-Dichloroethene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA cis-1,2-Dichloroethene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA trans-1,2-Dichloroethene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dichloropropane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,3-Dichloropropane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,3-Dichloropropane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA	1,1-Dichloroethane	ND	1.58	3.16	NA			11/27/2018 7:52 PM	PAVA
1,1-Dichloroethene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA cis-1,2-Dichloroethene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA trans-1,2-Dichloroethene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA 1,2-Dichloropropane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA 1,3-Dichloropropane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA 1,3-Dichloropropane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PAVA	1,2-Dichloroethane	ND	1.58	3.16	NA			11/27/2018 7:52 PM	PA/VA
cis-1,2-Dichloroethene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA trans-1,2-Dichloroethene ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dichloropropane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,3-Dichloropropane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,3-Dichloropropane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA	1,1-Dichloroethene	ND	1.58	3.16	NA			11/27/2018 7:52 PM	PAVA
trans-1,2-Dichloroethene ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,2-Dichloropropane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,3-Dichloropropane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA 1,3-Dichloropropane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA	cis-1,2-Dichloroethene	ND	1.58	3.16	NA			11/27/2018 7:52 PM	PAVA
1,2-Dichloropropane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,3-Dichloropropane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA 1,3-Dichloropropane ND 1.58 3.16 NA μg/Kg 11/27/2018 7:52 PM PA/VA	trans-1,2-Dichloroethene				NA				PAVA
1,3-Dichloropropane ND 1.58 3.16 NA µg/Kg 11/27/2018 7:52 PM PA/VA	1,2-Dichloropropane				NA				PAVA
70 PM			1.58	3.16	NA				PAVA
	2,2-Dichloropropane	ND	1.58	3.16	NA		µg/Kg	11/27/2018 7:52 PM	PAVA

WO#: 18112453

Date Reported: 12/4/2018

11/16/2018 12:30:00 PM

12/4/2018 Original

Client: Project: PACE ANALYTICAL SERVICES LLC-WV

0101-18-0317-001

Lab ID: 18112453-0

Client Sample ID:

18112453-03A 1805924-03 ((P43 A2 (0-3)) **Collection Date:**

Date Received:

Matrix:

11/19/2018

Solid

Site ID: WV

Analysis	Result	MDL	PQL	MCL	Qual Units	Date Analyzed NELAP
1,1-Dichloropropene	ND	1.58	3.16	NA	µg/Кд	11/27/2018 7:52 PM PAVA
cis-1,3-Dichloropropene	ND	1.58	3.16	NA	μg/Kg	11/27/2018 7:52 PM PAVA
trans-1,3-Dichloropropene	ND	1.58	3.16	NA	μg/Kg	11/27/2018 7:52 PM PAVA
Ethylbenzene	ND	1.58	3.16	NA	μg/Kg	11/27/2018 7:52 PM PAVA
Hexachlorobutadiene	ND	1.58	3.16	NA	µg/Кg	11/27/2018 7:52 PM PAVA
2-Hexanone	ND	15.8	31.6	NA	μg/Kg	11/27/2018 7:52 PM PAVA
lodomethane	ND	15.8	31.6	NA	μg/Kg	11/27/2018 7:52 PM PAVA
isopropylbenzene	ND	1.58	3.16	NA	μg/Kg	11/27/2018 7:52 PM PAVA
p-Isopropyltoluene	ND	1.58	3.16	NA	μg/Kg	11/27/2018 7:52 PM PAVA
Methylene chloride	ND	1.58	3.16	NA	μg/Kg	11/27/2018 7:52 PM PAVA
4-Methyl-2-pentanone	ND	15.8	31.6	NA	μg/Kg	11/27/2018 7:52 PM PAVA
MTBE	ND	7.90	15.8	NA	μg/Kg	11/27/2018 7:52 PM PAVA
n-Propylbenzene	ND	1.58	3.16	NA	µg/Кg	11/27/2018 7:52 PM PAVA
Styrene	ND	1.58	3.16	NA	µg/Кg	11/27/2018 7:52 PM PAVA
1,1,1,2-Tetrachioroethane	ND	1.58	3.16	NA	μg/Kg	11/27/2018 7:52 PM PAVA
1,1,2,2-Tetrachloroethane	ND	1.58	3.16	NA	μg/Kg	11/27/2018 7:52 PM PAVA
Tetrachloroethene	ND	1.58	3.16	NA	μg/Kg	11/27/2018 7:52 PM PAVA
Toluene	ND	1.58	3.16	NA	µg/Кg	11/27/2018 7:52 PM PA/VA
1,2,3-Trichlorobenzene	ND	1.58	3.16	NA	μg/Kg	11/27/2018 7:52 PM PAVA
1,2,4-Trichlorobenzene	ND	1.58	3.16	NA	µg/Кg	11/27/2018 7:52 PM PAVA
1,1,1-Trichloroethane	ND	1.58	3.16	NA	µg/Кg	11/27/2018 7:52 PM PAVA
1,1,2-Trichloroethane	ND	1.58	3.16	NA	µg/Кg	11/27/2018 7:52 PM PAVA
Trichloroethene	ND	1.58	3.16	NA	μg/Kg	11/27/2018 7:52 PM PAVA
Trichlorofluoromethane	ND	1.58	3.16	NA	μg/Kg	11/27/2018 7:52 PM PA/VA
1,2,3-Trichloropropane	ND	1.58	3.16	NA	μg/Kg	11/27/2018 7:52 PM PAVA
1,2,4-Trimethylbenzene	ND	1.58	3.16	NA	μg/Kg	11/27/2018 7:52 PM PA/VA
1,3,5-Trimethylbenzene	ND	1.58	3.16	NA	μg/Kg	11/27/2018 7:52 PM PAVA
Vinyl acetate	ND	15.8	31.6	NA	μg/Kg	11/27/2018 7:52 PM PA/VA
Vinyl chloride	ND	1.58	3.16	NA	μg/Kg	11/27/2018 7:52 PM PAVA
o-Xylene	ND	1.58	3.16	NA	μg/Kg	11/27/2018 7:52 PM
m,p-Xylene	ND	3.16	6.32	NA	μg/Kg	11/27/2018 7:52 PM
Surr: 1,2-Dichloroethane-d4	97.0	NA	65-124	NA	%Rec	11/27/2018 7:52 PM
Surr: 4-Bromofluorobenzene	105	NA	75.8-128	NA	%Rec	11/27/2018 7:52 PM
Surr: Dibromofluoromethane	97.2	NA	74.1-126	NA	%Rec	11/27/2018 7:52 PM
Surr: Toluene-d8	92.7	NA	77.3-130	NA	%Rec	11/27/2018 7:52 PM

WO#: 18112453

Date Reported: 12/4/2018

12/4/2018 Original

Client:

PACE ANALYTICAL SERVICES LLC-WV

Collection Date:
Date Received:

11/13/2018 4:00:00 PM

Project:

0101-18-0317-001

Date Recei

11/19/2018

Lab ID:

18112453-04A

Matrix:

Solid

Client Sample ID:

1805924-04 (P43 B6 (0-2))

Site ID:

WV

Analysis	Result	MDL	PQL	MCL	Qual	Units	Date Analyzed NE	LAP
PERCENT MOISTURE			Method:	SM2540	B-199	7	Analyst: DF	
Percent Moisture	27	NA	1.0	NA		wt%	11/20/2018 1:57 PM	
PCBS			Method:	SW8082	!A		Analyst: NC	
Aroclor 1016	ND	0.00829	0.0166	NA		mg/Kg	11/26/2018 5:40 PM	VA
Aroclor 1221	ND	0.00829	0.0166	NA		mg/Kg	11/26/2018 5:40 PM	VA
Aroclor 1232	ND	0.00829	0.0166	NA		mg/Kg	11/26/2018 5:40 PM	VA
Aroclor 1242	2.37	0.0829	0.166	NA		mg/Kg	12/3/2018 9:18 AM	VA
Aroclor 1248	ND	0.00829	0.0166	NA		mg/Kg	11/26/2018 5:40 PM	VA
Aroclor 1254	ND	0.00829	0.0166	NA		mg/Kg	11/26/2018 5:40 PM	VA
Aroclor 1260	ND	0.00829	0.0166	NA		mg/Kg	11/26/2018 5:40 PM	VA
Surr: Tetrachloro-m-xylene	146	NA	25.6-130	NA	S	%Rec	11/26/2018 5:40 PM	

Notes:

The ending CCV for Aroclors 1016 & 1260 exceeds laboratory control limits, indicating a high bias. Since the analytes were not detected in the sample, the reported results are not affected by this bias.

POLYNUCLEAR AROMATIC HY (SIM)	DROCARB	ONS	Method: \$	SW8270D SIM		Analyst: CLS	
Anthracene	0.00466	0.000698	0.00329	NA	mg/Kg	11/27/2018 11:22 PM	PAVA
Acenaphthene	0.00399	0.000698	0.00329	NA	mg/Kg	11/27/2018 11:22 PM	PAVA
Acenaphthylene	ND	0.000698	0.00329	NA	mg/Kg	11/27/2018 11:22 PM	PAVA
Benzo(a)anthracene	0.0496	0.000698	0.00329	NA	mg/Kg	11/27/2018 11:22 PM	PAVA
Benzo(a)pyrene	0.0402	0.000698	0.00329	NA	mg/Kg	11/27/2018 11:22 PM	PAVA
Benzo(b)fluoranthene	0.0469	0.000698	0.00329	NA	mg/Kg	11/27/2018 11:22 PM	PA/VA
Benzo(g,h,i)perylene	0.0236	0.000698	0.00329	NA	mg/Kg	11/27/2018 11:22 PM	PA/VA
Benzo(k)fluoranthene	0.0153	0.000698	0.00329	NA	mg/Kg	11/27/2018 11:22 PM	PA/VA
Chrysene	0.0339	0.000698	0.00329	NA	mg/Kg	11/27/2018 11:22 PM	PAVA
Dibenzo(a,h)anthracene	0.00632	0.000698	0.00329	NA	mg/Kg	11/27/2018 11:22 PM	PAVA
Fluoranthene	0.0552	0.000698	0.00329	NA	mg/Kg	11/27/2018 11:22 PM	PAVA
Fluorene	ND	0.000698	0.00329	NA	mg/Kg	11/27/2018 11:22 PM	PAVA
Indeno(1,2,3-cd)pyrene	0.0356	0.000698	0.00329	NA	mg/Kg	11/27/2018 11:22 PM	PAVA
Naphthalene	0.00599	0.000698	0.00329	NA	mg/Kg	11/27/2018 11:22 PM	PAVA
Phenanthrene	0.0236	0.000698	0.00329	NA	mg/Kg	11/27/2018 11:22 PM	PAVA
Pyrene	0.0446	0.000698	0.00329	NA	mg/Kg	11/27/2018 11:22 PM	PAVA
Surr: Nitrobenzene-d5	121	NA	23.3-150	NA	%Rec	11/27/2018 11:22 PM	
Surr: 2-Fluorobiphenyl	68.7	NA	40.1-121	NA	%Rec	11/27/2018 11:22 PM	
Surr: 4-Terphenyl-d14	72.7	NA	24.9-124	NA	%Rec	11/27/2018 11:22 PM	

WO#: 18112453

Date Reported: 12/4/2018

Original

Client: Project: PACE ANALYTICAL SERVICES LLC-WV

0101-18-0317-001

Lab ID:

18112453-04A

Client Sample ID: 1805924-04 (P43 B6 (0-2))

Collection Date:

11/13/2018 4:00:00 PM

Date Received: Matrix: 11/19/2018 Solid

Site ID:

Analysis	Result	MDL	PQL	MCL	Qual	Units	Date Analyzed N	IELAP
VOLATILE ORGANIC COMPO	UNDS-8260		Method:	SW8260	В		Analyst: TKC	
Acetone	70.3	16.0	32.0	NA		μg/Kg	11/27/2018 4:28 PM	PAVA
Acrolein	ND	16.0	32.0	NA		µg/Kg	11/27/2018 4:28 PM	PAVA
Acrylonitrile	ND	16.0	32.0	NA		µg/Kg	11/27/2018 4:28 PM	PAVA
Benzene	ND	1.60	3.20	NA		μg/Kg	11/27/2018 4:28 PM	PAVA
Bromobenzene	ND	1.60	3.20	NA		µg/Kg	11/27/2018 4:28 PM	PAVA
Bromochloromethane	NĐ	1.60	3.20	NA		μg/Kg	11/27/2018 4:28 PM	PAVA
Bromodichloromethane	ND	1.60	3.20	NA		µg/Кg	11/27/2018 4:28 PM	PAVA
Bromoform	ND	1.60	3.20	NA		μg/Kg	11/27/2018 4:28 PM	PAVA
Bromomethane	ND	1.60	3.20	NA		µg/Кд	11/27/2018 4:28 PM	PAVA
2-Butanone	ND	16.0	32.0	NA		μg/Kg	11/27/2018 4:28 PM	PAVA
n-Butylbenzene	ND	1.60	3.20	NA		µg/Kg	11/27/2018 4:28 PM	PAVA
sec-Butylbenzene	ND	1.60	3.20	NA		μg/Kg	11/27/2018 4:28 PM	PAVA
tert-Butylbenzene	ND	1.60	3.20	NA		μg/Kg	11/27/2018 4:28 PM	PAVA
Carbon disulfide	ND	8.00	16.0	NA		μg/Kg	11/27/2018 4:28 PM	PAVA
Carbon tetrachloride	ND	1.60	3.20	NA		μg/Kg	11/27/2018 4:28 PM	PAVA
Chlorobenzene	ND	1.60	3.20	NA		μg/Kg	11/27/2018 4:28 PM	PAVA
Chloroethane	ND	1.60	3.20	NA		μg/Kg	11/27/2018 4:28 PM	PAVA
Chloroform	ND	1.60	3.20	NA		μg/Kg	11/27/2018 4:28 PM	PA/VA
Chloromethane	ND	1.60	3.20	NA		μg/Kg	11/27/2018 4:28 PM	PAVA
2-Chlorotoluene	ND	1.60	3.20	NA		µg/Кg	11/27/2018 4:28 PM	PA/VA
4-Chlorotoluene	ND	1.60	3.20	NA		µg/Kg	11/27/2018 4:28 PM	PAVA
Dibromochloromethane	ND	1.60	3.20	NA		μg/Kg	11/27/2018 4:28 PM	PAVA
DBCP	ND	1.60	3.20	NA		μg/Kg	11/27/2018 4:28 PM	PAVA
1,2-Dibromoethane	ND	1.60	3.20	NA		μg/Kg	11/27/2018 4:28 PM	PAVA
Dibromomethane	ND	1.60	3.20	NA		μg/Kg	11/27/2018 4:28 PM	PA/VA
1,2-Dichlorobenzene	ND	1.60	3.20	NA		μg/Kg	11/27/2018 4:28 PM	PAVA
1,3-Dichlorobenzene	ND	1.60	3.20	NA		µg/Kg	11/27/2018 4:28 PM	PA/VA
1,4-Dichlorobenzene	ND	1.60	3.20	NA		μg/Kg	11/27/2018 4:28 PM	PAVA
Dichlorodifluoromethane	ND	1.60	3.20	NA		μg/Kg	11/27/2018 4:28 PM	PAVA
1,1-Dichloroethane	ND	1.60	3.20	NA		μg/Kg	11/27/2018 4:28 PM	PA/VA
1,2-Dichloroethane	ND	1.60	3.20	NA		μg/Kg	11/27/2018 4:28 PM	PAVA
1,1-Dichloroethene	ND	1.60	3.20	NA		μg/Kg	11/27/2018 4:28 PM	PAVA
cis-1,2-Dichloroethene	ND	1.60	3.20	NA		µg/Кд	11/27/2018 4:28 PM	PAVA
trans-1,2-Dichloroethene	ND	1.60	3.20	NA		µg/Kg	11/27/2018 4:28 PM	PAVA
1,2-Dichloropropane	ND	1.60	3.20	NA		μg/Kg	11/27/2018 4:28 PM	PA/VA
1,3-Dichloropropane	ND	1.60	3.20	NA		µg/Kg	11/27/2018 4:28 PM	PAVA
2,2-Dichloropropane	ND	1.60	3.20	NA		pg/Kg	11/27/2018 4:28 PM	PA/VA

WO#: 18112453

Date Reported: 12/4/2018

Original

Client: Project: PACE ANALYTICAL SERVICES LLC-WV

0101-18-0317-001

Lab ID:

Client Sample ID:

18112453-04A

1805924-04 (P43 B6 (0-2))

Collection Date:

11/13/2018 4:00:00 PM

Date Received: Matrix:

11/19/2018 Solid

Site ID:

Analysis	Result	MDL	PQL	MCL	Qual Units	Date Analyzed NELAP
1,1-Dichloropropene	ND	1.60	3.20	NA	μg/K ₉	11/27/2018 4:28 PM PA/VA
cis-1,3-Dichloropropene	ND	1.60	3.20	NA	μg/K	11/27/2018 4:28 PM PAVA
trans-1,3-Dichloropropene	ND	1.60	3.20	NA	μg/K	11/27/2018 4:28 PM PAVA
Ethylbenzene	ND	1.60	3.20	NA	μg/K	11/27/2018 4:28 PM PA/VA
Hexachlorobutadiene	ND	1.60	3.20	NA	μg/K _i	11/27/2018 4:28 PM PA/VA
2-Нехаполе	ND	16.0	32.0	NA	μg/Kg	11/27/2018 4:28 PM PA/VA
lodomethane	ND	16.0	32.0	NA	μg/K _s	11/27/2018 4:28 PM PAVA
Isopropylbenzene	ND	1.60	3.20	NA	μg/K	11/27/2018 4:28 PM PAVA
p-Isopropyltoluene	ND	1.60	3.20	NA	μg/K	11/27/2018 4:28 PM PAVA
Methylene chloride	ND	1.60	3.20	NA	μg/K _i	11/27/2018 4:28 PM PAVA
4-Methyl-2-pentanone	ND	16.0	32.0	NA	μg/K _i	11/27/2018 4:28 PM PAVA
MTBE	ND	8.00	16.0	NA	μg/Kį	11/27/2018 4:28 PM PA/VA
n-Propylbenzene	ND	1.60	3.20	NA	μg/Kį	11/27/2018 4:28 PM PA/VA
Styrene	ND	1.60	3.20	NA	μg/K _i	11/27/2018 4:28 PM PA/VA
1,1,1,2-Tetrachloroethane	ND	1.60	3.20	NA	μg/K _i	
1,1,2,2-Tetrachloroethane	ND	1.60	3.20	NA	μg/K _i	
Tetrachloroethene	ND	1.60	3.20	NA	μg/Kg	-
Toluene	ND	1.60	3.20	NA	μg/Kg	
1,2,3-Trichlorobenzene	ND	1.60	3.20	NA	µg/Kg	11/27/2018 4:28 PM PA/VA
1,2,4-Trichlorobenzene	ND	1.60	3.20	NA	μg/Kg	
1,1,1-Trichloroethane	ND	1.60	3.20	NA	μg/K	
1,1,2-Trichloroethane	ND	1.60	3.20	NA	μg/K _i	
Trichloroethene	ND	1.60	3.20	NA	μg/Kg	
Trichlorofluoromethane	ND	1.60	3.20	NA	μg/Kg	
1,2,3-Trichloropropane	ND	1.60	3.20	NA	μg/Kg	
1,2,4-Trimethylbenzene	ND	1.60	3.20	NA	μg/Kg	
1,3,5-Trimethylbenzene	ND	1.60	3.20	NA	μg/Kg	
Vinyl acetate	ND	16.0	32.0	NA	μg/Kg	
Vinyl chloride	ND	1.60	3.20	NA	μg/Kg	
o-Xylene	ND	1.60	3.20	NA	μg/Kg	
m,p-Xylene	ND	3.20	6.40	NA	μg/Kg	
Surr: 1,2-Dichloroethane-d4	91.8	NA	65-124	NA	%Re	
Surr: 4-Bromofluorobenzene	126	NA	75.8-128	NA	%Re	_
Surr: Dibromofluoromethane	93.6	NA	74.1-126	NA	%Re	
Sun: Toluene-d8	98.9	NA	77.3-130	NA	%Re	-

WO#: 18112453

Date Reported: 12/4/2018

Original

Client:

PACE ANALYTICAL SERVICES LLC-WV

Project: Lab ID:

0101-18-0317-001

18112453-05A

Client Sample ID:

1805924-05 (P43 D7 (5-7.5))

Collection Date:

11/13/2018 3:15:00 PM

Date Received:

11/19/2018

Matrix:

Solid

Site ID:

WV

Analysis	Result	MDL	PQL	MCL	Qual	Units	Date Analyzed NE	LAP
PERCENT MOISTURE			Method:	SM2540	B-1997	7	Analyst: DF	
Percent Moisture	20	NA	1.0	NA		wt%	11/20/2018 1:57 PM	
PCBS			Method:	SW8082	2 A		Analyst: NC	
Aroclor 1016	ND	0.00828	0.0166	NA		mg/Kg	11/26/2018 5:54 PM	VA
Aroclor 1221	ND	0.00828	0.0166	NA		mg/Kg	11/26/2018 5:54 PM	VA
Aroclor 1232	ND	0.00828	0.0166	NA		mg/Kg	11/26/2018 5:54 PM	VA
Aroclor 1242	ND	0.00828	0.0166	NA		mg/Kg	11/26/2018 5:54 PM	VA
Aroclor 1248	ND	0.00828	0.0166	NA		mg/Kg	11/26/2018 5:54 PM	VA
Aroclor 1254	ND	0.00828	0.0166	NA		mg/Kg	11/26/2018 5:54 PM	VA
Aroclor 1260	NĐ	0.00828	0.0166	NA		mg/Kg	11/26/2018 5:54 PM	VA
Surr: Tetrachloro-m-xylene	95.5	NA	25.6-130	NA		%Rec	11/26/2018 5:54 PM	

Notes:

The ending CCV for Aroclors 1016 & 1260 exceeds laboratory control limits, indicating a high bias. Since the analytes were not detected in the sample, the reported results are not affected by this bias.

POLYNUCLEAR AROMATIC HY (SIM)	DROCARB	ONS	Method: 3	SW8270D S	SIM	Analyst: CLS	
Anthracene	0.00599	0.000699	0.00330	NA	mg/Kg	11/27/2018 10:11 PM	PAVA
Acenaphthene	0.0136	0.000699	0.00330	NA	mg/Kg	11/27/2018 10:11 PM	PAVA
Acenaphthylene	ND	0.000699	0.00330	NA	mg/Kg	11/27/2018 10:11 PM	PAVA
Benzo(a)anthracene	0.0746	0.000699	0.00330	NA	mg/Kg	11/27/2018 10:11 PM	PAVA
Benzo(a)pyrene	0.0829	0.000699	0.00330	NA	mg/Kg	11/27/2018 10:11 PM	PAVA
Benzo(b)fluoranthene	0.0842	0.000699	0.00330	NA	mg/Kg	11/27/2018 10:11 PM	PAVA
Benzo(g,h,i)perylene	0.0579	0.000699	0.00330	NA	mg/Kg	11/27/2018 10:11 PM	PAVA
Benzo(k)fluoranthene	0.0403	0.000699	0.00330	NA	mg/Kg	11/27/2018 10:11 PM	PAVA
Chrysene	0.0503	0.000699	0.00330	NA	mg/Kg	11/27/2018 10:11 PM	PAVA
Dibenzo(a,h)anthracene	0.00965	0.000699	0.00330	NA	mg/Kg	11/27/2018 10:11 PM	PAVA
Fluoranthene	0.0699	0.000699	0.00330	NA	mg/Kg	11/27/2018 10:11 PM	PAVA
Fluorene	0.00266	0.000699	0.00330	NA .	J mg/Kg	11/27/2018 10:11 PM	PAVA
Indeno(1,2,3-cd)pyrene	0.0762	0.000699	0.00330	NA	mg/Kg	11/27/2018 10:11 PM	PAVA
Naphthalene	ND	0.000699	0.00330	NA	mg/Kg	11/27/2018 10:11 PM	PAVA
Phenanthrene	0.0210	0.000699	0.00330	NA	mg/Kg	11/27/2018 10:11 PM	PA/VA
Pyrene	0.0679	0.000699	0.00330	NA	mg/Kg	11/27/2018 10:11 PM	PAVA
Surr: Nitrobenzene-d5	90.9	NA	23.3-150	NA	%Rec	11/27/2018 10:11 PM	
Surr: 2-Fluorobiphenyl	64.6	NA	40.1-121	NA	%Rec	11/27/2018 10:11 PM	
Surr: 4-Terphenyl-d14	72.7	NA	24.9-124	NA	%Rec	11/27/2018 10:11 PM	

WO#: 18112453

Date Reported: 12/4/2018

Original

Client:

PACE ANALYTICAL SERVICES LLC-WV

Project: Lab ID:

0101-18-0317-001

Client Sample ID:

18112453-05A

1805924-05 (P43 D7 (5-7.5))

Collection Date:

11/13/2018 3:15:00 PM

Date Received: Matrix:

11/19/2018 Solid

Site ID:

Analysis	Result	MDL	PQL	MCL	Qual	Units	Date Analyzed N	IELAP
VOLATILE ORGANIC COMPOUND	DS-8260		Method:	SW8260	B		Analyst: TKC	
Acetone	ND	26.0	52.0	NA		µg/Кg	11/27/2018 5;02 PM	PAVA
Acrolein	ND	26.0	52.0	NA		μg/Kg	11/27/2018 5:02 PM	PAVA
Acrylanitrile	ND	26.0	52.0	NA		µg/Кg	11/27/2018 5:02 PM	PAVA
Benzene	ND	2.60	5.20	NA		µg/Кg	11/27/2018 5:02 PM	PAVA
Bromobenzene	ND	2.60	5.20	NA		µg/Кg	11/27/2018 5:02 PM	PAVA
Bromochloromethane	ND	2.60	5.20	NA		μg/Kg	11/27/2018 5:02 PM	PAVA
Bromodichloromethane	ND	2.60	5.20	NA		μg/Kg	11/27/2018 5:02 PM	PA/VA
Bromoform	ND	2.60	5.20	NA		μg/Kg	11/27/2018 5:02 PM	PA/VA
Bromomethane	ND	2.60	5.20	NA		µg/Кg	11/27/2018 5:02 PM	PAVA
2-Butanone	ND	26.0	52.0	NA		µg/Кg	11/27/2018 5:02 PM	PAVA
n-Butylbenzene	ND	2.60	5.20	NA		µg/Кg	11/27/2018 5:02 PM	PAVA
sec-Butylbenzene	ND	2.60	5.20	NA		µg/Кg	11/27/2018 5:02 PM	PAVA
tert-Butylbenzene	ND	2.60	5.20	NA		µg/Кg	11/27/2018 5:02 PM	PAVA
Carbon disulfide	ND	13.0	26.0	NA		µg/Кg	11/27/2018 5:02 PM	PAVA
Carbon tetrachloride	ND	2.60	5.20	NA		µg/Кg	11/27/2018 5:02 PM	PAVA
Chlorobenzene	ND	2.60	5.20	NA		µg/Кg	11/27/2018 5:02 PM	PA/VA
Chloroethane	ND	2.60	5.20	NA		µg/Кg	11/27/2018 5:02 PM	PAVA
Chloroform	ND	2.60	5.20	NA		µg/Кg	11/27/2018 5:02 PM	PAVA
Chloromethane	ND	2.60	5.20	NA		μg/Kg	11/27/2018 5:02 PM	PAVA
2-Chlorotoluene	ND	2.60	5.20	NA		µg/Кg	11/27/2018 5:02 PM	PAVA
4-Chlorotoluene	ND	2.60	5.20	NA		µg/Кg	11/27/2018 5:02 PM	PA/VA
Dibromochloromethane	ND	2.60	5.20	NA		рд/Кд	11/27/2018 5:02 PM	PAVA
DBCP	ND	2.60	5.20	NA		μg/Kg	11/27/2018 5:02 PM	PAVA
1,2-Dibromoethane	ND	2.60	5.20	NA		µg/Кg	11/27/2018 5:02 PM	PAVA
Dibromomethane	ND	2.60	5.20	NA		µg/Кg	11/27/2018 5:02 PM	PAVA
1,2-Dichlorobenzene	ND	2.60	5.20	NA		µg/Кg	11/27/2018 5:02 PM	PAVA
1,3-Dichlorobenzene	ND	2.60	5.20	NA		μg/Kg	11/27/2018 5:02 PM	PAVA
1,4-Dichlorobenzene	ND	2.60	5.20	NA		μg/Kg	11/27/2018 5:02 PM	PAVA
Dichlorodifluoromethane	ND	2.60	5.20	NA		рд/Кд	11/27/2018 5:02 PM	PAVA
1,1-Dichloroethane	ND	2.60	5.20	NA		μg/Kg	11/27/2018 5:02 PM	PAVA
1,2-Dichloroethane	ND	2.60	5.20	NA		μg/Kg	11/27/2018 5:02 PM	PAVA
1,1-Dichloroethene	ND	2.60	5.20	NA		μg/Kg	11/27/2018 5:02 PM	PA/VA
cis-1,2-Dichloroethene	ND	2.60	5.20	NA		μg/Kg	11/27/2018 5:02 PM	PAVA
trans-1,2-Dichloroethene	ND	2.60	5.20	NA		μg/Kg	11/27/2018 5:02 PM	PA/VA
1,2-Dichloropropane	ND	2.60	5.20	NA		μg/Kg	11/27/2018 5:02 PM	PAVA
1,3-Dichloropropane	ND	2.60	5.20	NA		μg/Kg	11/27/2018 5:02 PM	PAVA
• •						פייים		-

WO#: 18112453

Date Reported: 12/4/2018

12/4/2018 Original

Client:

PACE ANALYTICAL SERVICES LLC-WV

Project:

0101-18-0317-001

Lab ID: Client Sample ID: 18112453-05A

1805924-05 (P43 D7 (5-7.5))

Collection Date:

11/13/2018 3:15:00 PM

Date Received:

11/19/2018

Matrix:

Solid

Site ID:	WV
----------	----

1,1-Dichloropropene ND 2,60 5,20 NA µg/Kg 11/27/2018 5:02 PM PA/VA cls-1,3-Dichloropropene ND 2,60 5,20 NA µg/Kg 11/27/2018 5:02 PM PA/VA Elhylbenzene ND 2,60 5,20 NA µg/Kg 11/27/2018 5:02 PM PA/VA Elhylbenzene ND 2,60 5,20 NA µg/Kg 11/27/2018 5:02 PM PA/VA Elhylbenzene ND 2,60 5,20 NA µg/Kg 11/27/2018 5:02 PM PA/VA Hoxachlorobutadiene ND 2,60 5,20 NA µg/Kg 11/27/2018 5:02 PM PA/VA Hoxachlorobutadiene ND 2,60 5,20 NA µg/Kg 11/27/2018 5:02 PM PA/VA Lisopropylbenzene ND 2,60 5,20 NA µg/Kg 11/27/2018 5:02 PM PA/VA Isopropylbenzene ND 2,60 5,20 NA µg/Kg 11/27/2018 5:02 PM PA/VA Isopropylbenzene ND 2,60 5,20 NA µg/Kg 11/27/2018 5:02 PM PA/VA Isopropylbenzene ND 2,60 5,20 NA µg/Kg 11/27/2018 5:02 PM PA/VA Hostylene chioride ND 2,60 5,20 NA µg/Kg 11/27/2018 5:02 PM PA/VA Methylene chioride ND 2,60 5,20 NA µg/Kg 11/27/2018 5:02 PM PA/VA MTBE ND 13,0 2,60 NA µg/Kg 11/27/2018 5:02 PM PA/VA MTBE ND 13,0 2,60 NA µg/Kg 11/27/2018 5:02 PM PA/VA MTBE ND 2,60 5,20 NA µg/Kg 11/27/2018 5:02 PM PA/VA NTBE ND 2,60 5,20 NA µg/Kg 11/27/2018 5:02 PM PA/VA NTBE ND 2,60 5,20 NA µg/Kg 11/27/2018 5:02 PM PA/VA NTBE ND 2,60 5,20 NA µg/Kg 11/27/2018 5:02 PM PA/VA NTGE ND 2,60 5,20 NA µg/Kg 11/27/2018 5:02 PM PA/VA NTGErachloroethane ND 2,60 5,20 NA µg/Kg 11/27/2018 5:02 PM PA/VA NTGErachloroethane ND 2,60 5,20 NA µg/Kg 11/27/2018 5:02 PM PA/VA NTGErachloroethane ND 2,60 5,20 NA µg/Kg 11/27/2018 5:02 PM PA/VA NTGErachloroethane ND 2,60 5,20 NA µg/Kg 11/27/2018 5:02 PM PA/VA NTGHoloroethane ND 2,60 5,20 NA µg/Kg 11/27/2018 5:02 PM PA/VA NTGHoloroethane ND 2,60 5,20 NA µg/Kg 11/27/2018 5:02 PM PA/VA NTGHoloroethane ND 2,60 5,20 NA µg/Kg 11/27/2018 5:02 PM PA/VA NTGHoloroethane ND 2,60 5,20 NA µg/Kg 11/27/2018 5:02 PM PA/VA NTGHoloroethane ND 2,60 5,20 NA µg/Kg 11/27/2018 5:02 PM PA/VA NTGHoloroethane ND 2,60 5,20 NA µg/Kg 11/27/2018 5:02 PM PA/VA NTGHoloroethane ND 2,60 5,20 NA µg/Kg 11/27/2018 5:02 PM PA/VA NTGHoloroethane ND 2,60 5,20 NA µg/Kg 11/27/2018 5:02 PM PA/VA NTGHoloroethane ND 2,60 5,20 NA µg/Kg 11/27/2018 5:02 PM PA/VA NTGHoloroe	Analysis	Result	MDL	PQL	MCL	Qual Units	Date Analyzed Ni	ELAP
Irans-1,3-Dichloropropene	1,1-Dichloropropene	ND	2.60	5.20	NA	µg/Кg	11/27/2018 5:02 PM	PAVA
Ethylbenzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA Hexachlorobutadlene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA Alexachlorobutadlene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA Devaluation ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA International ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM P	cis-1,3-Dichloropropene	ND	2.60	5.20	NA	µg/Кg	11/27/2018 5:02 PM	PAVA
Hexachlorobutadlene ND 2.60 5.20 NA μg/kg 11/27/2018 5.02 PM PA/VA 2-Hexanone ND 2.60 52.0 NA μg/kg 11/27/2018 5.02 PM PA/VA 1-1/27/2018 5.02 PM PA/V	trans-1,3-Dichtoropropene	ND	2.60	5.20	NA	µg/Кg	11/27/2018 5:02 PM	PAVA
2-Hexanone ND 26.0 52.0 NA µg/Kg 11/27/2018 5:02 PM PAVA lodomethane ND 26.0 52.0 NA µg/Kg 11/27/2018 5:02 PM PAVA lodomethane ND 26.0 52.0 NA µg/Kg 11/27/2018 5:02 PM PAVA lsopropybenzere ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA PAVA P-Isopropylloluene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA Helthyle-pentanone ND 26.0 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 4-Melthyl-2-pentanone ND 26.0 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 4-Melthyl-2-pentanone ND 26.0 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 4-Melthyl-2-pentanone ND 26.0 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 4-Melthyl-2-pentanone ND 26.0 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 4-Melthyl-2-pentanone ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 5-PAVA 4-Melthyl-2-pentanone ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 1-1,1,2-Tetrachloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 1-1,1,2-Tetrachloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 1-1,1,2-Tetrachloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 1-1,2-3-Trichloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 1-2,3-Trichloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 1-2,3-Trichloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 1-2,3-Trichloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 1-1,2-Trichloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 1-1,2-Trichloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 1-1,2-Trichloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 1-1,2-Trichloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 1-1,2-Trichloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 1-1,2-Trichloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 1-1,2-Trichloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 1-2,3-Trichloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 1-2,3-Trichloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 1-2,3-Trichloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 1-2,3-Trichloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 1-2,3-Trichloroethane N	Ethylbenzene	ND	2.60	5.20	NA	µg/Кg	11/27/2018 5:02 PM	PAVA
International Notation Section	Hexachlorobutadiene	ND	2.60	5.20	NA	μg/Kg	11/27/2018 5:02 PM	PAVA
Sepropy Denzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PA/VA	2-Hexanone	ND	26.0	52.0	NA	µg/Кg	11/27/2018 5:02 PM	PAVA
p-isopropylloluene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA Methylene chloride ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 4-Methyl-2-pentanone ND 26.0 52.0 NA µg/Kg 11/27/2018 5:02 PM PAVA MTBE ND 13.0 26.0 NA µg/Kg 11/27/2018 5:02 PM PAVA n-Propylbenzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA Styrene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 1,1,2-Tetrachloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 1,1,2-Tetrachloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 1,1,2-Trichloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 1,2,4-Trichloroethane ND <	lodomethane	ND	26.0	52.0	NA	µg/Кд	11/27/2018 5:02 PM	PAVA
Melhylene chloride ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PA/VA 4-Methyl-2-pentanone ND 26.0 52.0 NA µg/Kg 11/27/2018 5:02 PM PA/VA MTBE ND 13.0 26.0 NA µg/Kg 11/27/2018 5:02 PM PA/VA NP-Propylbenzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PA/VA Slyrene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PA/VA 1,1,2,2-Tetrachloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PA/VA 1,1,2,2-Tetrachloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PA/VA 1,1,2,2-Trichlorobenzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PA/VA 1,2,4-Trichlorobenzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PA/VA 1,1,2-Trichlorobenzene	Isopropylbenzene	ND	2.60	5.20	NA	µg/Кg	11/27/2018 5:02 PM	PAVA
4-Methyl-2-pentanone ND 26.0 52.0 NA μg/Kg 11/27/2018 5:02 PM PAVA NTBE ND 13.0 26.0 NA μg/Kg 11/27/2018 5:02 PM PAVA NTBE ND 13.0 26.0 NA μg/Kg 11/27/2018 5:02 PM PAVA NTPropylbenzene ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PAVA 1.1.1,2-Tetrachloroethane ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PAVA 1.1.1,2-Tetrachloroethane ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PAVA 1.1.2,2-Tetrachloroethane ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PAVA 1.1.2,3-Trichloroethane ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PAVA 1.2,3-Trichloroethane ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PAVA 1.2,3-Trichloroethane ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PAVA 1.2,4-Trichloroethane ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PAVA 1.2,4-Trichloroethane ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PAVA 1.1,1-Trichloroethane ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PAVA 1.1,1-Trichloroethane ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PAVA 1.1,1-Trichloroethane ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PAVA 1.1,2-Trichloroethane ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PAVA 1.1,2-Trichloroethane ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PAVA 1.1,2-Trichloroethane ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PAVA 1.2,3-Trichloroethane ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PAVA 1.2,3-Trichlorofluoromethane ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PAVA 1.2,3-Trichloropropane ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PAVA 1.2,3-Trichloropropane ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PAVA 1.3,5-Trimethylbenzene ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PAVA 1.3,5-Trimethylbenzene ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PAVA 1.3,5-Trimethylbenzene ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PAVA 1.3,5-Trimethylbenzene ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PAVA 1.3,5-Trimethylbenzene ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PAVA 1.3,5-Trimethylbenzene ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PAVA 1.3,5-Trimethylbenzene ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PAVA 1.4	p-Isopropyltoluene	ND	2.60	5.20	NA	μg/Kg	11/27/2018 5:02 PM	PAVA
MTBE ND 13.0 26.0 NA µg/Kg 11/27/2018 5:02 PM PA/VA n-Propylbenzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PA/VA Styrene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PA/VA 1,1,2,2-Tetrachloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PA/VA 1,1,2,2-Tetrachloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PA/VA Tetrachloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PA/VA Toluene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PA/VA 1,2,3-Trichlorobenzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PA/VA 1,1,2-Trichloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PA/VA Trichloroethane ND	Methylene chloride	ND	2.60	5.20	NA	μg/Kg	11/27/2018 5:02 PM	PAVA
n-Propylbenzene ND 2.60 5.20 NA µg/kg 11/27/2018 5:02 PM PA/VA Styrene ND 2.60 5.20 NA µg/kg 11/27/2018 5:02 PM PA/VA 1.1,1,2-Tetrachloroethane ND 2.60 5.20 NA µg/kg 11/27/2018 5:02 PM PA/VA 1.1,2,2-Tetrachloroethane ND 2.60 5.20 NA µg/kg 11/27/2018 5:02 PM PA/VA 1.1,2,2-Tetrachloroethane ND 2.60 5.20 NA µg/kg 11/27/2018 5:02 PM PA/VA Totuene ND 2.60 5.20 NA µg/kg 11/27/2018 5:02 PM PA/VA 1,2,4-Trichlorobenzene ND 2.60 5.20 NA µg/kg 11/27/2018 5:02 PM PA/VA 1,1,1-Trichloroethane ND 2.60 5.20 NA µg/kg 11/27/2018 5:02 PM PA/VA 1,1,2-Trichloroethane ND 2.60 5.20 NA µg/kg 11/27/2018 5:02 PM PA/VA Trichloroethane	4-Methyl-2-pentanone	ND	26.0	52.0	NA	µg/Кg	11/27/2018 5:02 PM	PAVA
Styrene	MTBE	ND	13.0	26.0	NA	µg/Кg	11/27/2018 5:02 PM	PAVA
1,1,1,2-Tetrachloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 1,1,2,2-Tetrachloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA Tetrachloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA Toluene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 1,2,3-Trichlorobenzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 1,2,4-Trichlorobenzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 1,1,1-Trichloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 1,1,2-Trichloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA Trichlorofluoromethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 1,2,3-Trichloropropane<	n-Propylbenzene	ND	2.60	5.20	NA	µg/Кg	11/27/2018 5:02 PM	PAVA
1,1,2,2-Tetrachloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA Tetrachloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA Toluene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 1,2,3-Trichlorobenzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 1,2,4-Trichlorobenzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 1,1,1-Trichloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 1,1,2-Trichloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 1,1,2-Trichloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 1,2,3-Trichloropropane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 1,2,4-Trimethylbenzene	Styrene	ND	2.60	5.20	NA	µg/Кg	11/27/2018 5:02 PM	PA/VA
1,1,2,2-Tetrachloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA Tetrachloroethene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA Toluene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 1,2,3-Trichlorobenzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 1,2,4-Trichlorobenzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 1,1,1-Trichloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 1,1,2-Trichloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA Trichlorofluoromethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 1,2,3-Trichloropropane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA 1,3,5-Trimethylbenzene <td>1,1,1,2-Tetrachloroethane</td> <td>ND</td> <td>2.60</td> <td>5.20</td> <td>NA</td> <td></td> <td>11/27/2018 5:02 PM</td> <td>PAVA</td>	1,1,1,2-Tetrachloroethane	ND	2.60	5.20	NA		11/27/2018 5:02 PM	PAVA
Tetrachloroethene ND 2.60 5.20 NA µg/kg 11/27/2018 5:02 PM PAVA Toluene ND 2.60 5.20 NA µg/kg 11/27/2018 5:02 PM PAVA 1,2,3-Trichlorobenzene ND 2.60 5.20 NA µg/kg 11/27/2018 5:02 PM PAVA 1,2,4-Trichloroethane ND 2.60 5.20 NA µg/kg 11/27/2018 5:02 PM PAVA 1,1,1-Trichloroethane ND 2.60 5.20 NA µg/kg 11/27/2018 5:02 PM PAVA 1,1,2-Trichloroethane ND 2.60 5.20 NA µg/kg 11/27/2018 5:02 PM PAVA 1,1,2-Trichloroethane ND 2.60 5.20 NA µg/kg 11/27/2018 5:02 PM PAVA Trichlorofluoromethane ND 2.60 5.20 NA µg/kg 11/27/2018 5:02 PM PAVA 1,2,3-Trichloropropane ND 2.60 5.20 NA µg/kg 11/27/2018 5:02 PM PAVA 1,2,4-Trimethylbenzene	1,1,2,2-Tetrachloroethane	ND	2.60	5.20	NA		11/27/2018 5:02 PM	PAVA
Tolluene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA 1,2,3-Trichlorobenzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA 1,2,4-Trichlorobenzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA 1,1,1-Trichloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA 1,1,2-Trichloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA 1,1,2-Trichloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA 1,1,2-Trichloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA 1,2,3-Trichlorofluoromethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA 1,2,3-Trichloropropane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA 1,2,3-Trimethylbenzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA 1,3,5-Trimethylbenzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA 1,3,5-Trimethylbenzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA 1,3,5-Trimethylbenzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA 1,3,5-Trimethylbenzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA 1,3,5-Trimethylbenzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA 1,3,5-Trimethylbenzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA 1,3,5-Trimethylbenzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA 1,3,5-Trimethylbenzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA 1,3,5-Trimethylbenzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA 1,3,5-Trimethylbenzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA 1,3,5-Trimethylbenzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA 1,3,5-Trimethylbenzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA 1,3,5-Trimethylbenzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA 1,3,5-Trimethylbenzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA 1,3,5-Trimethylbenzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA 1,3,5-Trimethylbenzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA 1,3,5-Trimethylbenzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA 1,3,5-Trimethylbenzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA 1,3,5-Trimethylbenzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA 1,3,5-Trimethylbenzene ND 2.	Tetrachloroethene	ND	2.60	5.20	NA		11/27/2018 5:02 PM	PAVA
1,2,3-Trichlorobenzene ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PAVA 1,2,4-Trichlorobenzene ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PAVA 1,1,1-Trichloroethane ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PAVA 1,1,2-Trichloroethane ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PAVA Trichloroethane ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PAVA Trichlorofluoromethane ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PAVA 1,2,3-Trichloropropane ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PAVA 1,2,4-Trimethylbenzene ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PAVA Vinyl acetate ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PAVA Vinyl chloride	Toluene	ND	2.60	5.20	NA		11/27/2018 5:02 PM	PAVA
1,2,4-Trichlorobenzene ND 2.60 5.20 NA µg/kg 11/27/2018 5:02 PM PAVA 1,1,1-Trichloroethane ND 2.60 5.20 NA µg/kg 11/27/2018 5:02 PM PAVA 1,1,2-Trichloroethane ND 2.60 5.20 NA µg/kg 11/27/2018 5:02 PM PAVA 1,1,2-Trichloroethane ND 2.60 5.20 NA µg/kg 11/27/2018 5:02 PM PAVA 1,2,3-Trichloropropane ND 2.60 5.20 NA µg/kg 11/27/2018 5:02 PM PAVA 1,2,4-Trimethylbenzene ND 2.60 5.20 NA µg/kg 11/27/2018 5:02 PM PAVA 1,3,5-Trimethylbenzene ND 2.60 5.20 NA µg/kg 11/27/2018 5:02 PM PAVA Vinyl acetate ND 2.60 52.0 NA µg/kg 11/27/2018 5:02 PM PAVA Vinyl chloride ND 2.60 5.20 NA µg/kg 11/27/2018 5:02 PM PAVA 0-Xylene N	1,2,3-Trichlorobenzene	ND	2.60	5.20	NA		11/27/2018 5:02 PM	PAVA
1,1,1-Trichloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA 1,1,2-Trichloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA Trichloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA Trichlorofluoromethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA 1,2,3-Trichloropropane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA 1,2,4-Trimethylbenzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA 1,3,5-Trimethylbenzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA Vinyl acetate ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA Vinyl chloride ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA 0-Xylene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVA<	1,2,4-Trichlorobenzene	ND	2.60	5.20	NA		11/27/2018 5:02 PM	PAVA
1,1,2-Trichloroethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA Trichloroethene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA Trichlorofluoromethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA 1,2,3-Trichloropropane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA 1,2,4-Trimethylbenzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA 1,3,5-Trimethylbenzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA Vinyl acetate ND 2.60 52.0 NA µg/Kg 11/27/2018 5:02 PM PAVVA Vinyl chloride ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA 0-Xylene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PAVVA Surr: 1,2-Dichloroethane-d4	1,1,1-Trichloroethane	ND	2.60	5.20	NA		11/27/2018 5:02 PM	PAVA
Trichloroethene ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PA/VA 1,2,3-Trichloropropane ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PA/VA 1,2,3-Trichloropropane ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PA/VA 1,2,4-Trimethylbenzene ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PA/VA 1,3,5-Trimethylbenzene ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PA/VA 1,3,5-Trimethylbenzene ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PA/VA Vinyl acetate ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PA/VA Vinyl chloride ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PA/VA 0-Xylene ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PA/VA 0-Xylene ND 5.20 10.4 NA μg/Kg 11/27/2018 5:02 PM Surr: 1,2-Dichloroethane-d4 90.3 NA 65-124 NA μg/Kg 11/27/2018 5:02 PM Surr: 4-Bromofluorobenzene 114 NA 75.8-128 NA %Rec 11/27/2018 5:02 PM Surr: Dibromofluoromethane 97.9 NA 74.1-126 NA %Rec 11/27/2018 5:02 PM	1,1,2-Trichloroethane	ND	2.60	5.20	NA		11/27/2018 5:02 PM	PAVA
Trichlorofluoromethane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PA/VA 1,2,3-Trichloropropane ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PA/VA 1,2,4-Trimethylbenzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PA/VA 1,3,5-Trimethylbenzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PA/VA 1,3,5-Trimethylbenzene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PA/VA Vinyl acetate ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PA/VA Vinyl chloride ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PA/VA 0-Xylene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM PA/VA 0-Xylene ND 5.20 10.4 NA µg/Kg 11/27/2018 5:02 PM M,p-Xylene ND 5.20 10.4 NA µg/Kg 11/27/2018 5:02 PM Surr: 1,2-Dichloroethane-d4 90.3 NA 65-124 NA %Rec 11/27/2018 5:02 PM Surr: 4-Bromofluorobenzene 114 NA 75.8-128 NA %Rec 11/27/2018 5:02 PM Surr: Dibromofluoromethane 97.9 NA 74.1-126 NA %Rec 11/27/2018 5:02 PM	Trichloroethene	ND	2.60	5.20	NA		11/27/2018 5:02 PM	PAVA
1,2,3-Trichloropropane ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PA/VA 1,2,4-Trimethylbenzene ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PA/VA 1,3,5-Trimethylbenzene ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PA/VA Vinyl acetate ND 26.0 52.0 NA μg/Kg 11/27/2018 5:02 PM PA/VA Vinyl chloride ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PA/VA 0-Xylene ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PA/VA 0-Xylene ND 5.20 10.4 NA μg/Kg 11/27/2018 5:02 PM m,p-Xylene ND 5.20 10.4 NA μg/Kg 11/27/2018 5:02 PM Surr: 1,2-Dichloroethane-d4 90.3 NA 65-124 NA μg/Kg 11/27/2018 5:02 PM Surr: 4-Bromofluorobenzene 114 NA 75.8-128 NA %Rec 11/27/2018 5:02 PM Surr: Dibromofluoromethane 97.9 NA 74.1-126 NA %Rec 11/27/2018 5:02 PM	Trichlorofluoromethane	ND	2.60	5.20	NA		11/27/2018 5:02 PM	PAVA
1,2,4-Trimethylbenzene ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PA/VA 1,3,5-Trimethylbenzene ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PA/VA Vinyl acetate ND 26.0 52.0 NA μg/Kg 11/27/2018 5:02 PM PA/VA Vinyl chloride ND 2.60 52.0 NA μg/Kg 11/27/2018 5:02 PM PA/VA O-Xylene ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PA/VA O-Xylene ND 5.20 10.4 NA μg/Kg 11/27/2018 5:02 PM m,p-Xylene ND 5.20 10.4 NA μg/Kg 11/27/2018 5:02 PM Surr: 1,2-Dichloroethane-d4 90.3 NA 65-124 NA μg/Kg 11/27/2018 5:02 PM Surr: 4-Bromofluorobenzene 114 NA 75.8-128 NA %Rec 11/27/2018 5:02 PM Surr: Dibromofluoromethane 97.9 NA 74.1-126 NA %Rec 11/27/2018 5:02 PM	1,2,3-Trichloropropane	ND	2.60	5.20	NA		11/27/2018 5:02 PM	PA/VA
1,3,5-Trimethylbenzene ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PA/VA Vinyl acetate ND 26.0 52.0 NA μg/Kg 11/27/2018 5:02 PM PA/VA Vinyl chloride ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PA/VA o-Xylene ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PA/VA m,p-Xylene ND 5.20 10.4 NA μg/Kg 11/27/2018 5:02 PM Surr: 1,2-Dichloroethane-d4 90.3 NA 65-124 NA %Rec 11/27/2018 5:02 PM Surr: 4-Bromofluorobenzene 114 NA 75.8-128 NA %Rec 11/27/2018 5:02 PM Surr: Dibromofluoromethane 97.9 NA 74.1-126 NA %Rec 11/27/2018 5:02 PM	1,2,4-Trimethylbenzene	ND	2.60	5.20	NA		11/27/2018 5:02 PM	PAVA
Vinyl acetate ND 26.0 52.0 NA μg/Kg 11/27/2018 5:02 PM PA/VA Vinyl chloride ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PA/VA o-Xylene ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PA/VA m,p-Xylene ND 5.20 10.4 NA μg/Kg 11/27/2018 5:02 PM Surr: 1,2-Dichloroethane-d4 90.3 NA 65-124 NA %Rec 11/27/2018 5:02 PM Surr: 4-Bromofluorobenzene 114 NA 75.8-128 NA %Rec 11/27/2018 5:02 PM Surr: Dibromofluoromethane 97.9 NA 74.1-126 NA %Rec 11/27/2018 5:02 PM	1,3,5-Trimethylbenzene	ND	2.60	5.20	NA		11/27/2018 5:02 PM	PAVA
Vinyl chloride ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM PA/VA o-Xylene ND 2.60 5.20 NA μg/Kg 11/27/2018 5:02 PM 11/27/2018 5:02 PM m,p-Xylene ND 5.20 10.4 NA μg/Kg 11/27/2018 5:02 PM Surr: 1,2-Dichloroethane-d4 90.3 NA 65-124 NA %Rec 11/27/2018 5:02 PM Surr: 4-Bromofluorobenzene 114 NA 75.8-128 NA %Rec 11/27/2018 5:02 PM Surr: Dibromofluoromethane 97.9 NA 74.1-126 NA %Rec 11/27/2018 5:02 PM	Vinyl acetate	ND	26.0	52.0	NA		11/27/2018 5:02 PM	PAVA
o-Xylene ND 2.60 5.20 NA µg/Kg 11/27/2018 5:02 PM m,p-Xylene ND 5.20 10.4 NA µg/Kg 11/27/2018 5:02 PM Surr: 1,2-Dichloroethane-d4 90.3 NA 65-124 NA %Rec 11/27/2018 5:02 PM Surr: 4-Bromofluorobenzene 114 NA 75.8-128 NA %Rec 11/27/2018 5:02 PM Surr: Dibromofluoromethane 97.9 NA 74.1-126 NA %Rec 11/27/2018 5:02 PM	Vinyl chloride	ND	2.60	5.20	NA		11/27/2018 5:02 PM	PAVA
m,p-Xylene ND 5.20 10.4 NA μg/Kg 11/27/2018 5:02 PM Surr: 1,2-Dichloroethane-d4 90.3 NA 65-124 NA %Rec 11/27/2018 5:02 PM Surr: 4-Bromofluorobenzene 114 NA 75.8-128 NA %Rec 11/27/2018 5:02 PM Surr: Dibromofluoromethane 97.9 NA 74.1-126 NA %Rec 11/27/2018 5:02 PM	o-Xylene	ND	2.60	5.20	NA		11/27/2018 5:02 PM	
Surr: 1,2-Dichloroethane-d4 90.3 NA 65-124 NA %Rec 11/27/2018 5:02 PM Surr: 4-Bromofluorobenzene 114 NA 75.8-128 NA %Rec 11/27/2018 5:02 PM Surr: Dibromofluoromethane 97.9 NA 74.1-126 NA %Rec 11/27/2018 5:02 PM	m,p-Xylene		5.20	10.4	NA			
Surr: 4-Bromofluorobenzene 114 NA 75.8-128 NA %Rec 11/27/2018 5:02 PM Surr: Dibromofluoromethane 97.9 NA 74.1-126 NA %Rec 11/27/2018 5:02 PM	Surr: 1,2-Dichloroethane-d4	90.3	NA	65-124	NA			
Surr: Dibromofluoromethane 97.9 NA 74.1-126 NA %Rec 11/27/2018 5:02 PM	Surr: 4-Bromofluorobenzene		NA	75.8-128	NA			
	Surr: Dibromofluoromethane		NA	74.1-126	NA			
	Surr: Toluene-d8	89.2	NA		NA	%Rec	11/27/2018 5:02 PM	

WO#: 18112453

Date Reported: 12/4/2018

Original

Client:

PACE ANALYTICAL SERVICES LLC-WV

Collection Date:

11/14/2018 5:00:00 PM

Project:

0101-18-0317-001

Date Received:

11/19/2018

Lab ID:

18112453-06A

Matrix:

Solid

Client Sample ID:

1805924-06 (P43 E3 (0-2.5))

Site ID:

WV

Analysis	Result	MDL	PQL	MCL	Qual	Units	Date Analyzed NE	LAP
PERCENT MOISTURE			Method:	SM2540	B-199	7	Analyst: DF	
Percent Moisture	13	NA	1.0	NA		wt%	11/20/2018 1:57 PM	
PCBS			Method: \$	SW8082	! A		Analyst: NC	
Aroclor 1016	ND	0.00830	0.0166	NA		mg/Kg	11/26/2018 6:08 PM	VA
Aroclor 1221	ND	0.00830	0.0166	NA		mg/Kg	11/26/2018 6:08 PM	VA
Aroclor 1232	ND	0.00830	0.0166	NA		mg/Kg	11/26/2018 6:08 PM	VA
Aroclor 1242	8.75	0.0830	0.166	NA		mg/Kg	12/3/2018 9:32 AM	VA
Aroclor 1248	ND	0.00830	0.0166	NA		mg/Kg	11/26/2018 6:08 PM	VA
Aroclor 1254	ND	0.00830	0.0166	NA		mg/Kg	11/26/2018 6:08 PM	VA
Aroclor 1260	ND	0.00830	0.0166	NA		mg/Kg	11/26/2018 6:08 PM	VA
Surr: Tetrachloro-m-xylene	153	NA	25.6-130	NA	S	%Rec	11/26/2018 6:08 PM	

Notes:

The ending CCV for Aroclors 1016 & 1260 exceeds laboratory control limits, indicating a high bias. Since the analytes were not detected in the sample, the reported results are not affected by this bias.

POLYNUCLEAR AROMATIC HYD (SIM)	ROCARBON	S Met	hod: SW827	OD SIM		Analyst: CLS	
Anthracene	0.0116 0.0	00697 0.0	00329 NA		mg/Kg	11/27/2018 11:46 PM	PA/VA
Acenaphthene	0.0116 0.0	00697 0.	00329 NA		mg/Kg	11/27/2018 11:46 PM	PA/VA
Acenaphthylene	0.00232 0.0	00697 0.6	00329 NA	J	mg/Kg	11/27/2018 11:46 PM	PA/VA
Benzo(a)anthracene	0.0773 0.0	00697 0.6	00329 NA		mg/Kg	11/27/2018 11:46 PM	PAVA
Benzo(a)pyrene	0.0757 0.0	00697 0.6	00329 NA		mg/Kg	11/27/2018 11:46 PM	PAVA
Benzo(b)fiuoranthene	0.0757 0.0	00697 0.0	00329 NA		mg/Kg	11/27/2018 11:46 PM	PAVA
Benzo(g,h,i)perylene	0.0571 0.0	00697 0.0	00329 NA		mg/Kg	11/27/2018 11:46 PM	PAVA
Benzo(k)fluoranthene	0.0272 0.0	00697 0.6	00329 NA		mg/Kg	11/27/2018 11:46 PM	PA/VA
Chrysene	0.0478 0.0	00697 0.0	00329 NA		mg/Kg	11/27/2018 11:46 PM	PAVA
Dibenzo(a,h)anthracene	0.0123 0.0	00697 0.0	00329 NA		mg/Kg	11/27/2018 11:46 PM	PAVA
Fluoranthene	0.0634 0.0	00697 0.0	00329 NA		mg/Kg	11/27/2018 11:46 PM	PA/VA
Fluorene	0.00299 0.0	00697 0.0	00329 NA	J	mg/Kg	11/27/2018 11:46 PM	PAVA
Indeno(1,2,3-cd)pyrene	0.0780 0.0	00697 0.6	00329 NA		mg/Kg	11/27/2018 11:46 PM	PA/VA
Naphthalene	0.00531 0.0	00697 0.6	00329 NA		mg/Kg	11/27/2018 11:46 PM	PAVA
Phenanthrene	0.0236 0.0	00697 0.0	00329 NA		mg/Kg	11/27/2018 11:46 PM	PAVA
Pyrene	0.0544 0.0	00697 0.0	00329 NA		mg/Kg	11/27/2018 11:46 PM	PA/VA
Surr: Nitrobenzene-d5	105	NA 23	3-150 NA		%Rec	11/27/2018 11:46 PM	
Surr: 2-Fluorobiphenyl	64.6	NA 40	1-121 NA		%Rec	11/27/2018 11:46 PM	
Surr: 4-Terphenyl-d14	66.7	NA 24	9-124 NA		%Rec	11/27/2018 11:46 PM	

WO#: 18112453

Date Reported: 12/4/2018

Original

Client:

PACE ANALYTICAL SERVICES LLC-WV

Project: Lab ID:

0101-18-0317-001

Client Sample ID:

18112453-06A

1805924-06 (P43 E3 (0-2.5))

Collection Date:

11/14/2018 5:00:00 PM

Date Received: Matrix:

11/19/2018 Solid

Site ID:

Analysis	Result	MDL	PQL	MCL	Qual	Units	Date Analyzed N	IELAP
VOLATILE ORGANIC COMPO	UNDS-8260		Method:	SW8260)B		Analyst: TKC	
Acetone	ND	18.0	36.0	NA		μg/Kg	11/27/2018 5;36 PM	PAVA
Acrolein	ND	18.0	36.0	NA		μg/Kg	11/27/2018 5:36 PM	PAVA
Acrylanitrile	ND	18.0	36.0	NA		µg/Кg	11/27/2018 5:36 PM	PAVA
Benzene	ND	1.80	3.60	NA		µg/Кд	11/27/2018 5:36 PM	PAVA
Bromobenzene	ND	1.80	3.60	NA		µg/Кg	11/27/2018 5:36 PM	PAVA
Bromochloromethane	ND	1.80	3.60	NA		µg/Кg	11/27/2018 5:36 PM	PAVA
Bromodichloromethane	ND	1.80	3.60	NA		μg/Kg	11/27/2018 5:36 PM	PAVA
Bromoform	ND	1.80	3.60	NA		µg/Кg	11/27/2018 5:36 PM	PA/VA
Bromomethane	ND	1.80	3.60	NA		µg/Кg	11/27/2018 5:36 PM	PAVA
2-Butanone	ND	18.0	36.0	NA		µg/Кg	11/27/2018 5:36 PM	PAVA
n-Butylbenzene	ND	1.80	3.60	NA		µg/Кg	11/27/2018 5:36 PM	PAVA
sec-Butylbenzene	ND	1.80	3.60	NA		µg/Кg	11/27/2018 5:36 PM	PAVA
tert-Butylbenzene	ND	1.80	3.60	NA		µg/Кg	11/27/2018 5:36 PM	PAVA
Carbon disulfide	ND	9.00	18.0	NA		µg/Kg	11/27/2018 5:36 PM	PAVA
Carbon tetrachloride	ND	1.80	3.60	NA		µg/Кg	11/27/2018 5:36 PM	PAVA
Chlorobenzene	ND	1.80	3.60	NA		µg/Kg	11/27/2018 5:36 PM	PAVA
Chloroethane	ND	1.80	3.60	NA		μg/Kg	11/27/2018 5:36 PM	PAVA
Chloroform	ND	1.80	3.60	NA		µg/Кд	11/27/2018 5:36 PM	PAVA
Chloromethane	ND	1.80	3.60	NA		µg/Кg	11/27/2018 5:36 PM	PA/VA
2-Chlorololuene	ND	1.80	3.60	NA		μg/Kg	11/27/2018 5:36 PM	PAVA
4-Chlorotoluene	ND	1.80	3.60	NA		µg/Кg	11/27/2018 5:36 PM	PAVA
Dibromochloromethane	ND	1.80	3.60	NA		µg/Kg	11/27/2018 5:36 PM	PAVA
DBCP	ND	1.80	3.60	NA		μg/Kg	11/27/2018 5:36 PM	PAVA
1,2-Dibromoethane	ND	1.80	3.60	NA		μg/Kg	11/27/2018 5:36 PM	PAVA
Dibromomethane	ND	1.80	3.60	NA		μg/Kg	11/27/2018 5:36 PM	PAVA
1,2-Dichlorobenzene	ND	1.80	3.60	NA		μg/Kg	11/27/2018 5:36 PM	PAVA
1,3-Dichlorobenzene	ND	1.80	3.60	NA		μg/Kg	11/27/2018 5:36 PM	PAVA
1,4-Dichlorobenzene	ND	1.80	3.60	NA		μg/Kg	11/27/2018 5:36 PM	PAVA
Dichtorodifluoromethane	ND	1.80	3.60	NA		μg/Kg	11/27/2018 5:36 PM	PAVA
1,1-Dichloroethane	ND	1.80	3.60	NA		μg/Kg	11/27/2018 5:36 PM	PAVA
1,2-Dichloroethane	ND	1.80	3.60	NA		μg/Kg	11/27/2018 5:36 PM	PAVA
1,1-Dichloroethene	ND	1.80	3.60	NA		μg/Kg	11/27/2018 5:36 PM	PAVA
cis-1,2-Dichloroethene	ND	1.80	3.60	NA		μg/Kg	11/27/2018 5:36 PM	PAVA
trans-1,2-Dichloroethene	ND	1.80	3.60	NA		µg/Kg	11/27/2018 5:36 PM	PAVA
1,2-Dichloropropane	ND	1.80	3.60	NA		μg/Kg	11/27/2018 5:36 PM	PA/VA
1,3-Dichloropropane	ND	1.80	3.60	NA		µg/Kg	11/27/2018 5:36 PM	PAVA
2,2-Dichloropropane	ND	1.80	3.60	NA		µg/Kg	11/27/2018 5:36 PM	PA/VA

WO#: 18112453

Date Reported: 12/4/2018

Original

Client: Project:

Lab ID:

PACE ANALYTICAL SERVICES LLC-WV

0101-18-0317-001

Client Sample ID:

18112453-06A

1805924-06 (P43 E3 (0-2.5))

Collection Date:

11/14/2018 5:00:00 PM

Date Received: Matrix: 11/19/2018 Solid

Site ID:

Analysis	Result	MDL	PQL	MCL	Qual	Units	Date Analyzed N	IELAP
1,1-Dichloropropene	ND	1.80	3.60	NA		μg/Kg	11/27/2018 5:36 PM	PAVA
cis-1,3-Dichtoropropene	ND	1.80	3.60	NA		µg/Kg	11/27/2018 5:36 PM	PAVA
trans-1,3-Dichloropropene	ND	1.80	3.60	NA		μg/Kg	11/27/2018 5:36 PM	PAVA
Ethylbenzene	ND	1.80	3.60	NA		µg/Kg	11/27/2018 5:36 PM	PA/VA
Hexachtorobutadiene	ND	1.80	3.60	NA		μg/Kg	11/27/2018 5:36 PM	PAVA
2-Hexanone	ND	18.0	36.0	NA		µg/Kg	11/27/2018 5:36 PM	PAVA
lodomethane	ND	18.0	36.0	NA		μg/Kg	11/27/2018 5:36 PM	PA/VA
Isopropylbenzene	ND	1.80	3.60	NA		µg/Kg	11/27/2018 5:36 PM	PAVA
p-Isopropyltoluene	20.9	1.80	3.60	NA		μg/Kg	11/27/2018 5:36 PM	PA/VA
Methylene chloride	ND	1.80	3.60	NA		μg/Kg	11/27/2018 5:36 PM	PAVA
4-Methyl-2-pentanone	ND	18.0	36.0	NA		μg/Kg	11/27/2018 5:36 PM	PA/VA
мтве	ND	9.00	18.0	NA		μg/Kg	11/27/2018 5:36 PM	PAVA
n-Propylbenzene	ND	1.80	3.60	NA		μg/Kg	11/27/2018 5:36 PM	PAVA
Styrene	ND	1.80	3.60	NA		μg/Kg	11/27/2018 5:36 PM	PAVA
1,1,1,2-Tetrachloroethane	ND	1.80	3.60	NA		μg/Kg	11/27/2018 5:36 PM	PAVA
1,1,2,2-Tetrachloroethane	ND	1.80	3.60	NA		μg/Kg	11/27/2018 5:36 PM	PAVA
Tetrachloroethene	ND	1.80	3.60	NA		μg/Kg	11/27/2018 5:36 PM	PA/VA
Toluene	ND	1.80	3.60	NA		μg/Kg	11/27/2018 5:36 PM	PA/VA
1,2,3-Trichlorobenzene	ND	1.80	3.60	NA		μg/Kg	11/27/2018 5:36 PM	PAVA
1,2,4-Trichlorobenzene	ND	1.80	3.60	NA		µg/Kg	11/27/2018 5:36 PM	PAVA
1,1,1-Trichloroethane	ND	1.80	3.60	NA		µg/Kg	11/27/2018 5:36 PM	PAVA
1,1,2-Trichloroethane	ND	1.80	3.60	NA		μg/Kg	11/27/2018 5:36 PM	PAVA
Trichloroethene	ND	1.80	3.60	NA		μg/Kg	11/27/2018 5:36 PM	PA/VA
Trichloroftuoromethane	ND	1.80	3.60	NA		μg/Kg	11/27/2018 5:36 PM	PA/VA
1,2,3-Trichloropropane	ND	1.80	3.60	NA		μg/Kg	11/27/2018 5:36 PM	PA/VA
1,2,4-Trimethylbenzene	ND	1.80	3.60	NA		μg/Kg	11/27/2018 5:36 PM	PAVA
1,3,5-Trimethylbenzene	ND	1.80	3.60	NA		μg/Kg	11/27/2018 5:36 PM	PAVA
Vinyl acetate	ND	18.0	36.0	NA		μg/Kg	11/27/2018 5:36 PM	PAVA
Vinyl chloride	ND	1.80	3.60	NA		μg/Kg	11/27/2018 5:36 PM	PAVA
o-Xylene	ND	1.80	3.60	NA		μg/Kg	11/27/2018 5:36 PM	
m,p-Xylene	NĐ	3.60	7.20	NA		μg/Kg	11/27/2018 5:36 PM	
Surr: 1,2-Dichloroethane-d4	130	NA	65-124	NA	s	%Rec	11/27/2018 5:36 PM	
Surr: 4-Bromofluorobenzene	104	NA	75.8-128	NA		%Rec	11/27/2018 5:36 PM	
Surr: Dibromofluoromethane	110	NA	74.1-126	NA		%Rec	11/27/2018 5:36 PM	
Cur. Dibromondoromatikane								

WO#: 18112453

Date Reported: 12/4/2018

12/4/2018 Original

Client:

PACE ANALYTICAL SERVICES LLC-WV

Collection Date:

11/14/2018 5:30:00 PM

Project: Lab ID: 0101-18-0317-001 18112453-07A Date Received: Matrix:

11/19/2018 Solid

Client Sample ID:

1805924-07 (P43 F2 (0-2.4))

Site ID:

WV

Analysis	Result	MDL	PQL	MCL	Qual	Units	Date Analyzed NE	LAP
PERCENT MOISTURE			Method:	SM2540	B-199	7	Analyst: DF	
Percent Moisture	17	NA	1,0	NA		wt%	11/20/2018 1:57 PM	
PCBS			Method: \$	SW8082	2A		Analyst: NC	
Aroclor 1016	ND	0.00833	0.0167	NA		mg/Kg	11/26/2018 6:22 PM	VA
Aroclor 1221	ND	0.00833	0.0167	NA		mg/Kg	11/26/2018 6:22 PM	VA
Aroclor 1232	ND	0.00833	0.0167	NA		mg/Kg	11/26/2018 6:22 PM	VA
Aroclor 1242	3.41	0.0833	0.167	NA		mg/Kg	12/3/2018 9:46 AM	VA
Aroclor 1248	ND	0.00833	0.0167	NA		mg/Kg	11/26/2018 6:22 PM	VA
Aroclor 1254	ND	0.00833	0.0167	NA		mg/Kg	11/26/2018 6:22 PM	VA
Aroclor 1260	ND	0.00833	0.0167	NA		mg/Kg	11/26/2018 6:22 PM	VA
Surr: Tetrachloro-m-xylene	154	NA	25.6-130	NA	S	%Rec	11/26/2018 6:22 PM	

Notes:

The ending CCV for Aroclors 1016 & 1260 exceeds laboratory control limits, indicating a high bias. Since the analytes were not detected in the sample, the reported results are not affected by this bias.

POLYNUCLEAR AROMATIC HYDROCARBONS (SIM)			Method: \$	SW8270D SIM		Analyst: CLS	
Anthracene	0.0276	0.000697	0.00329	NA	mg/Kg	11/28/2018 12:10 AM	PAVA
Acenaphthene	0.0176	0.000697	0.00329	NA	mg/Kg	11/28/2018 12:10 AM	PAVA
Acenaphthylene	0.00398	0.000697	0.00329	NA	mg/Kg	11/28/2018 12:10 AM	PAVA
Benzo(a)anthracene	0.108	0.000697	0.00329	NA	mg/Kg	11/28/2018 12:10 AM	PA/VA
Benzo(a)pyrene	0.0890	0.000697	0.00329	NA	mg/Kg	11/28/2018 12:10 AM	PAVA
Benzo(b)fluoranthene	0.0853	0.000697	0.00329	NA	mg/Kg	11/28/2018 12:10 AM	PAVA
Benzo(g,h,i)perylene	0.0568	0.000697	0.00329	NA	mg/Kg	11/28/2018 12:10 AM	PAVA
Benzo(k)fluoranthene	0.0289	0.000697	0.00329	NA	mg/Kg	11/28/2018 12:10 AM	PAVA
Chrysene	0.0641	0.000697	0.00329	NA	mg/Kg	11/28/2018 12:10 AM	PAVA
Dibenzo(a,h)anthracene	0.0126	0.000697	0.00329	NA	mg/Kg	11/28/2018 12:10 AM	PAVA
Fluoranthene	0.127	0.000697	0.00329	NA	mg/Kg	11/28/2018 12:10 AM	PAVA
Fluorene	0.0116	0.000697	0.00329	NA	mg/Kg	11/28/2018 12:10 AM	PAVA
Indeno(1,2,3-cd)pyrene	0.0784	0.000697	0.00329	NA	mg/Kg	11/28/2018 12:10 AM	PAVA
Naphthalene	0.0120	0.000697	0.00329	NA	mg/Kg	11/28/2018 12:10 AM	PAVA
Phenanthrene	0.0850	0.000697	0.00329	NA	mg/Kg	11/28/2018 12:10 AM	PAVA
Ругеле	0.103	0.000697	0.00329	NA	mg/Kg	11/28/2018 12:10 AM	PAVA
Surr: Nitrobenzene-d5	116	NA	23.3-150	NA	%Rec	11/28/2018 12:10 AM	
Surr: 2-Fluorobiphenyl	68.7	NA	40.1-121	NA	%Rec	11/28/2018 12:10 AM	
Surr: 4-Terphenyl-d14	73.7	NA	24.9-124	NA	%Rec	11/28/2018 12:10 AM	

WO#: 18112453

Date Reported: 12/4/2018

12/4/2018 Original

Client:

PACE ANALYTICAL SERVICES LLC-WV

Project: Lab ID:

0101-18-0317-001

Client Sample ID:

18112453-07A

1805924-07 (P43 F2 (0-2.4))

Collection Date:

11/14/2018 5:30:00 PM

Date Received:

11/19/2018

Matrix:

Site ID:

Solid WV

Analysis	Result	MDL	PQL	MCL	Qual	Units	Date Analyzed	NELAP
VOLATILE ORGANIC COMPOUNI	DS-8260		Method:	SW8260	В	 :	Analyst: TKC	;
Acetone	ND	20.0	40.0	NA		μg/Kg	11/27/2018 6:10 PM	PA/VA
Acrolein	ND	20.0	40.0	NA		µg/Kg	11/27/2018 6:10 PM	
Acrylonitrile	ND	20.0	40.0	NA		μg/Kg	11/27/2018 6:10 PM	
Benzene	ND	2.00	4.00	NA		μg/Kg	11/27/2018 6:10 PM	
Bromobenzene	ND	2.00	4.00	NA		μg/Kg	11/27/2018 6:10 PM	
Bromochloromethane	ND	2.00	4.00	NA		μg/Kg	11/27/2018 6:10 PM	
Bromodichloromethane	ND	2.00	4.00	NA		μg/Kg	11/27/2018 6:10 PM	
Bromoform	ND	2.00	4.00	NA		μg/Kg	11/27/2018 6:10 PM	
Bromomethane	ND	2.00	4.00	NA		μg/Kg	11/27/2018 6:10 PM	
2-Butanone	ND	20.0	40.0	NA		µg/Kg	11/27/2018 6:10 PM	
n-Butytbenzene	ND	2.00	4.00	NA		µg/Kg	11/27/2018 6:10 PM	
sec-Butylbenzene	ND	2.00	4.00	NA		µg/Kg	11/27/2018 6:10 PM	
tert-Butylbenzene	ND	2.00	4.00	NA		μg/Kg	11/27/2018 6:10 PM	
Carbon disulfide	ND	10.0	20.0	NA		µg/Kg	11/27/2018 6:10 PM	
Carbon tetrachloride	ND	2.00	4.00	NA		µg/Kg	11/27/2018 6:10 PM	
Chlorobenzene	ND	2.00	4.00	NA		µg/Kg	11/27/2018 6:10 PM	
Chloroethane	ND	2.00	4.00	NA		μg/Kg	11/27/2018 6:10 PM	PAVA
Chloroform	ND	2.00	4.00	NA		μg/Kg	11/27/2018 6:10 PM	PAVA
Chloromethane	ND	2.00	4.00	NA		μg/Kg	11/27/2018 6:10 PM	PAVA
2-Chlorotoluene	ND	2.00	4.00	NA		μg/Kg	11/27/2018 6:10 PM	
4-Chlorotoluene	ND	2.00	4.00	NA		μg/Kg	11/27/2018 6:10 PM	PAVA
Dibromochloromethane	ND	2.00	4.00	NA		µg/Kg	11/27/2018 6:10 PM	PAVA
DBCP	ND	2.00	4.00	NA		μg/Kg	11/27/2018 6:10 PM	PAVA
1,2-Dibromoethane	ND	2.00	4.00	NA		μg/Kg	11/27/2018 6:10 PM	PAVA
Dibromomethane	ND	2.00	4.00	NA		μg/Kg	11/27/2018 6:10 PM	PAVA
1,2-Dichlorobenzene	ND	2.00	4.00	NA		µg/Кg	11/27/2018 6:10 PM	PAVA
1,3-Dichlorobenzene	ND	2.00	4.00	NA		µg/Кg	11/27/2018 6:10 PM	PA/VA
1,4-Dichlorobenzene	ND	2.00	4.00	NA		μg/Kg	11/27/2018 6:10 PM	PAVA
Dichlorodifluoromethane	ND	2.00	4.00	NA		μg/Kg	11/27/2018 6:10 PM	PA/VA
1,1-Dichloroethane	ND	2.00	4.00	NA		µg/Kg	11/27/2018 6:10 PM	PAVA
,2-Dichloroethane	ND	2.00	4.00	NA		μg/Kg	11/27/2018 6:10 PM	PAVA
,1-Dichloroethene	ND	2.00	4.00	NA		µg/Kg	11/27/2018 6:10 PM	PAVA
cis-1,2-Dichloroethene	ND	2.00	4.00	NA		µg/Кg	11/27/2018 6:10 PM	PAVA
rans-1,2-Dichloroethene	ND	2.00	4.00	NA		ру/К <u>а</u>	11/27/2018 6:10 PM	PAVA
,2-Dichloropropane	ND	2.00	4.00	NA			11/27/2018 6:10 PM	PAVA
,3-Dichloropropane	ND	2.00	4.00	NA		μg/Kg	11/27/2018 6:10 PM	PAVA
2,2-Dichloropropane	ND	2.00	4.00	NA		µg/Kg µg/Kg	11/27/2018 6:10 PM	PAVA

WO#: 18112453

Date Reported: 12/4/2018

Original

Client:

PACE ANALYTICAL SERVICES LLC-WV

Collection Date:

11/14/2018 5:30:00 PM

Project: Lab ID: 0101-18-0317-001

Date Received:

11/19/2018

Lab ID;

18112453-07A

Matrix:

Solid

Client Sample ID:

1805924-07 (P43 F2 (0-2.4))

Site ID:

Analysis	Result	MDL	PQL	MCL	Qual	Units	Date Analyzed N	IELAP
1,1-Dichloropropene	ND	2.00	4.00	NA		µg/Кg	11/27/2018 6:10 PM	PAVA
cis-1,3-Dichloropropene	ND	2.00	4.00	NA		µg/Кg	11/27/2018 6:10 PM	PA/VA
trans-1,3-Dichloropropene	ND	2.00	4.00	NA		μg/Kg	11/27/2018 6:10 PM	PAVA
Ethylbenzene	ND	2.00	4.00	NA		μg/Kg	11/27/2018 6:10 PM	PAVA
Hexachlorobutadiene	ND	2.00	4.00	NA		μg/Kg	11/27/2018 6:10 PM	PAVA
2-Hexanone	ND	20.0	40.0	NA	- 1	µg/Kg	11/27/2018 6:10 PM	PAVA
lodomethane	ND	20.0	40.0	NA		μg/Kg	11/27/2018 6:10 PM	PAVA
Isopropylbenzene	ND	2.00	4.00	NA		µg/Kg	11/27/2018 6:10 PM	PAVA
p-Isopropyltoluene	ND	2.00	4.00	NA		µg/Кg	11/27/2018 6:10 PM	PAVA
Methylene chloride	ND	2.00	4.00	NA		μg/Kg	11/27/2018 6:10 PM	PAVA
4-Methyl-2-репtапопе	ND	20.0	40.0	NA		μg/Kg	11/27/2018 6:10 PM	PAVA
MTBE	ND	10.0	20.0	NA		µg/Kg	11/27/2018 6:10 PM	PAVA
n-Propylbenzene	ND	2.00	4.00	NA		μg/Kg	11/27/2018 6:10 PM	PAVA
Styrene	ND	2.00	4.00	NA		µg/Kg	11/27/2018 6:10 PM	PAVA
1,1,1,2-Tetrachloroethane	ND	2.00	4.00	NA		μg/Kg	11/27/2018 6:10 PM	PAVA
1,1,2,2-Tetrachloroethane	ND	2.00	4.00	NA		µg/Кg	11/27/2018 6:10 PM	PAVA
Tetrachloroethene	ND	2.00	4.00	NA		μg/Kg	11/27/2018 6:10 PM	PAVA
Toluene	ND	2.00	4.00	NA		µg/Кg	11/27/2018 6:10 PM	PAVA
1,2,3-Trichlorobenzene	ND	2.00	4.00	NA		μg/Kg	11/27/2018 6:10 PM	PAVA
1,2,4-Trichlorobenzene	ND	2.00	4.00	NA		μg/Kg	11/27/2018 6:10 PM	PAVA
1,1,1-Trichloroethane	ND	2.00	4.00	NA		μg/Kg	11/27/2018 6:10 PM	PAVA
1,1,2-Trichloroethane	NĐ	2.00	4.00	NA		μg/Kg	11/27/2018 6:10 PM	PA/VA
Trichloroethene	ND	2.00	4.00	NA		µg/Кg	11/27/2018 6:10 PM	PAVA
Trichlorofluoromethane	ND	2.00	4.00	NA		μg/Kg	11/27/2018 6:10 PM	PAVA
1,2,3-Trichloropropane	ND	2.00	4.00	NA		µg/Kg	11/27/2018 6:10 PM	PA/VA
1,2,4-Trimethylbenzene	ND	2.00	4.00	NA		µg/Kg	11/27/2018 6:10 PM	PAVA
1,3,5-Trimethylbenzene	ND	2.00	4.00	NA		μg/Kg	11/27/2018 6:10 PM	PAVA
/inyl acetate	ND	20.0	40.0	NA		μg/Kg	11/27/2018 6:10 PM	PAVA
/inyl chloride	ND	2.00	4.00	NA		μg/Kg	11/27/2018 6:10 PM	PAVA
o-Xylene	ND	2.00	4.00	NA		μg/Kg	11/27/2018 6:10 PM	
π,p-Xylene	ND	4.00	8.00	NA		μg/Kg	11/27/2018 6:10 PM	
Surr: 1,2-Dichloroethane-d4	91.9	NA	65-124	NA		%Rec	11/27/2018 6:10 PM	
Surr: 4-Bromofluorobenzene	109	NA	75.8-128	NA		%Rec	11/27/2018 6:10 PM	
Surr: Dibromofluoromethane	94.1	NA	74.1-126	NA		%Rec	11/27/2018 6:10 PM	
Surr: Toluene-d8	88.6	NA	77.3-130	NA		701.100	,	

WO#: 18112453

Date Reported: 12/4/2018

Original

Client:

PACE ANALYTICAL SERVICES LLC-WV

Collection Date:

11/15/2018 5:00:00 PM

Project: Lab ID: 0101-18-0317-001

Date Received:

11/19/2018

Lab ID:

18112453-08A

Matrix:

Solid

Client Sample ID:

1805924-08 (P45 B1 (0-2.5))

Site ID:

WV

Analysis	Result	MDL	PQL	MCL	Qual	Units	Date Analyzed NE	LAP
PERCENT MOISTURE			Method:	SM2540	B-199	7	Analyst: DF	
Percent Moisture	22	NA	1.0	NA		wt%	11/20/2018 1:57 PM	
PCBS			Method:	SW8082	!A		Analyst: NC	
Aroclor 1016	ND	0.00831	0.0166	NA		mg/Kg	11/26/2018 6:36 PM	VA
Aroclar 1221	ND	0.00831	0.0166	NA		mg/Kg	11/26/2018 6:36 PM	VA
Aroclor 1232	ND	0.00831	0.0166	NA		mg/Kg	11/26/2018 6:36 PM	VA
Aroclor 1242	ND	0.00831	0.0166	NA		mg/Kg	11/26/2018 6:36 PM	VA
Aroclor 1248	ND	0.00831	0.0166	NA		mg/Kg	11/26/2018 6:36 PM	VA
Aroclor 1254	ND	0.00831	0.0166	NA		mg/Kg	11/26/2018 6:36 PM	VA
Aroclor 1260	ND	0.00831	0.0166	NA		mg/Kg	11/26/2018 6:36 PM	VA
Surr: Tetrachloro-m-xytene	152	NA	25.6-130	NA	S	%Rec	11/26/2018 6:36 PM	

Notes:

The ending CCV for Aroclors 1016 & 1260 exceeds laboratory control limits, indicating a high bias. Since the analytes were not detected in the sample, the reported results are not affected by this bias.

POLYNUCLEAR AROMATIC HYD (SIM)	DROCARB	ONS	Method:	SW8270D S	SIM	Analyst: CLS	
Anthracene	0.0136	0.000699	0.00329	NA	mg/Kg	11/28/2018 12:34 AM	PAVA
Acenaphthene	0.0299	0.000699	0.00329	NA	mg/Kg	11/28/2018 12:34 AM	PA/VA
Acenaphthylene	ND	0.000699	0.00329	NA	mg/Kg	11/28/2018 12:34 AM	PAVA
Benzo(a)anthracene	0.134	0.000699	0.00329	NA	mg/Kg	11/28/2018 12:34 AM	PAVA
Benzo(a)pyrene	0.130	0.000699	0.00329	NA	mg/Kg	11/28/2018 12:34 AM	PAVA
Benzo(b)fluoranthene	0.142	0.000699	0.00329	NA	mg/Kg	11/28/2018 12:34 AM	PAVA
Benzo(g,h,i)perylene	0,115	0.000699	0.00329	NA	mg/Kg	11/28/2018 12:34 AM	PAVA
Benzo(k)fluoranthene	0.0489	0.000699	0.00329	NA	mg/Kg	11/28/2018 12:34 AM	PAVA
Chrysene	0.0955	0.000699	0.00329	NA	mg/Kg	11/28/2018 12:34 AM	PA/VA
Dibenzo(a,h)anthracene	0.0210	0.000699	0.00329	NA	mg/Kg	11/28/2018 12:34 AM	PA/VA
Fluoranthene	0.140	0.000699	0.00329	NA	mg/Kg	11/28/2018 12:34 AM	PA/VA
Fluorene	0.00432	0.000699	0.00329	NA	mg/Kg	11/28/2018 12:34 AM	PA/VA
Indeno(1,2,3-cd)pyrene	0.154	0.000699	0.00329	NA	mg/Kg	11/28/2018 12:34 AM	PAVA
Naphthalene	0.00233	0.000699	0.00329	NA	J mg/Kg	11/28/2018 12:34 AM	PAVA
Phenanthrene	0,0536	0.000699	0.00329	NA	mg/Kg	11/28/2018 12:34 AM	PAVA
Pyrene	0.131	0.000699	0.00329	NA	mg/Kg	11/28/2018 12:34 AM	PAVA
Surr: Nitrobenzene-d5	128	NA	23.3-150	NA	%Rec	11/28/2018 12:34 AM	
Surr: 2-Fluorobiphenyl	73.7	NA	40.1-121	NA	%Rec	11/28/2018 12:34 AM	
Surr: 4-Terphenyl-d14	76.8	NA	24.9-124	NA	%Rec	11/28/2018 12:34 AM	

WO#: 18112453

Date Reported: 12/4/2018

Original

Client:

PACE ANALYTICAL SERVICES LLC-WV

Collection Date:

11/15/2018 5:00:00 PM

Project:

0101-18-0317-001

Date Received:

11/19/2018

Lab ID:

18112453-08A

Matrix:

Solid

Client Sample ID:

1805924-08 (P45 B1 (0-2.5))

Site ID:

Analysis	Result	MDL	PQL	MCL	Qual	Units	Date Analyzed N	IELAP
VOLATILE ORGANIC COMPOUND	DS-8260		Method:	SW8260	В		Analyst: TKC	
Acetone	ND	20.0	40.0	NA		μg/Kg	11/27/2018 8:25 PM	PAVA
Acrolein	ND	20.0	40.0	NA		μg/Kg	11/27/2018 8:25 PM	PAVA
Acrylonitrile	ND	20.0	40.0	NA		μg/Kg	11/27/2018 8:25 PM	PAVA
Benzene	ND	2.00	4.00	NA		µg/Кg	11/27/2018 8:25 PM	PA/VA
Bromobenzene	ND	2.00	4.00	NA		µg/Кg	11/27/2018 8:25 PM	PA/VA
Bromochloromethane	ND	2.00	4.00	NA		µg/Kg	11/27/2018 8:25 PM	PAVA
Bromodichloromethane	ND	2.00	4.00	NA		μg/Kg	11/27/2018 8:25 PM	PA/VA
Bromoform	ND	2.00	4.00	NA		μg/Kg	11/27/2018 8:25 PM	PAVA
Bromomethane	ND	2.00	4.00	NA		μg/Kg	11/27/2018 8:25 PM	PAVA
2-Butanone	ND	20.0	40.0	NA		μg/Kg	11/27/2018 8:25 PM	PA/VA
n-Butylbenzene	ND	2.00	4.00	NA		μg/Kg	11/27/2018 8:25 PM	PAVA
sec-Butylbenzene	ND	2.00	4.00	NA		µg/Kg	11/27/2018 8:25 PM	PA/VA
tert-Butylbenzene	ND	2.00	4.00	NA		μg/Kg	11/27/2018 8:25 PM	PA/VA
Carbon disulfide	ND	10.0	20.0	NA		μg/Kg	11/27/2018 8:25 PM	PAVA
Carbon tetrachloride	ND	2.00	4.00	NA		µg/Кg	11/27/2018 8:25 PM	PAVA
Chlorobenzene	ND	2.00	4.00	NA		μg/Kg	11/27/2018 8:25 PM	PAVA
Chloroethane	ND	2.00	4.00	NA		µg/Kg	11/27/2018 8:25 PM	PA/VA
Chloroform	ND	2.00	4.00	NA		µg/Kg	11/27/2018 8:25 PM	PAVA
Chloromethane	ND	2.00	4.00	NA		µg/Kg	11/27/2018 8:25 PM	PA/VA
2-Chlorotoluene	ND	2.00	4.00	NA		µg/Kg	11/27/2018 8:25 PM	PAVA
4-Chlorotoluene	ND	2.00	4.00	NA		μg/Kg	11/27/2018 8:25 PM	PA/VA
Dibromochloromethane	ND	2.00	4.00	NA		µg/Kg	11/27/2018 8:25 PM	PA/VA
DBCP	ND	2.00	4.00	NA		µg/Кg	11/27/2018 8:25 PM	PAVA
1,2-Dibromoethane	ND	2.00	4.00	NA		µg/Kg	11/27/2018 8:25 PM	PAVA
Dibromomethane	ND	2.00	4.00	NA		μg/Kg	11/27/2018 8:25 PM	PAVA
1,2-Dichlorobenzene	ND	2.00	4.00	NA		μg/Kg	11/27/2018 8:25 PM	PA/VA
1,3-Dichlorobenzene	ND	2.00	4.00	NA		µg/Кg	11/27/2018 8:25 PM	PAVA
1,4-Dichlorobenzene	ND	2.00	4.00	NA		µg/Kg	11/27/2018 8:25 PM	PAVA
Dichlorodifluoromethane	ND	2.00	4.00	NA		µg/Kg	11/27/2018 8:25 PM	PAVA
1,1-Dichloroethane	ND	2.00	4.00	NA		µg/Kg	11/27/2018 8:25 PM	PAVA
1,2-Dichloroethane	ND	2.00	4.00	NA		µg/Кg	11/27/2018 8:25 PM	PAVA
1,1-Dichloroethene	ND	2.00	4.00	NA		µg/Kg	11/27/2018 8:25 PM	PAVA
cis-1,2-Dichloroethene	ND	2.00	4.00	NA		μg/Kg	11/27/2018 8:25 PM	PA/VA
trans-1,2-Dichloroethene	ND	2.00	4.00	NA		µg/Kg	11/27/2018 8:25 PM	PAVA
1,2-Dichloropropane	ND	2.00	4.00	NA		µg/Kg	11/27/2018 8:25 PM	PAVA
1,3-Dichloropropane	ND	2.00	4.00	NA		pg/Kg	11/27/2018 8:25 PM	PAVA
2,2-Dichloropropane	ND	2.00	4.00	NA		ру/кд µg/Кд	11/27/2018 8:25 PM	PAVA

WO#: 18112453

Date Reported: 12/4/2018

Original

Client: Project: PACE ANALYTICAL SERVICES LLC-WV

0101-18-0317-001

Lab ID:

18112453-08A

Client Sample ID:

1805924-08 (P45 B1 (0-2.5))

Collection Date:

11/15/2018 5:00:00 PM

Date Received:

11/19/2018

Matrix: Site ID:

Solid WV

Analysis	Result	MDL	PQL	MCL	Qual Units	Date Analyzed N	IELAP
1,1-Dichloropropene	ND	2.00	4.00	NA	μg/Kg	11/27/2018 8:25 PM	PAVA
cis-1,3-Dichloropropene	ND	2.00	4.00	NA	μg/Kg	11/27/2018 8:25 PM	PAVA
trans-1,3-Dichloropropene	ND	2.00	4.00	NA	μg/Kg	11/27/2018 8:25 PM	PAVA
Ethylbenzene	ND	2.00	4.00	NA	μg/Kg	11/27/2018 8:25 PM	PAVA
Hexachlorobutadiene	ND	2.00	4.00	NA	μg/Kg	11/27/2018 8:25 PM	PAVA
2-Hexanone	ND	20.0	40.0	NA	μg/Kg	11/27/2018 8:25 PM	PA/VA
lodomethane	ND	20.0	40.0	NA	μg/Kg	11/27/2018 8:25 PM	PAVA
Isopropylbenzene	ND	2.00	4.00	NA	μg/Kg	11/27/2018 8:25 PM	PAVA
p-Isopropyitoluene	ND	2.00	4.00	NA	μg/Kg	11/27/2018 8:25 PM	PA/VA
Methylene chloride	ND	2.00	4.00	NA	μg/Kg	11/27/2018 8:25 PM	PAVA
4-Methyl-2-pentanone	ND	20.0	40.0	NA	μg/Kg	11/27/2018 8:25 PM	PAVA
MTBE	ND	10.0	20.0	NA	μg/Kg	11/27/2018 8:25 PM	PAVA
n-Propylbenzene	ND	2.00	4.00	NA	μg/Kg	11/27/2018 8:25 PM	PAVA
Styrene	ND	2.00	4.00	NA	μg/Kg	11/27/2018 8:25 PM	PA/VA
1,1,1,2-Tetrachloroethane	ND	2.00	4.00	NA	μg/Kg	11/27/2018 8:25 PM	PAVA
1,1,2,2-Tetrachloroethane	ND	2.00	4.00	NA	μg/Kg	11/27/2018 8:25 PM	PA/VA
Tetrachloroethene	ND	2.00	4.00	NA	μg/Kg	11/27/2018 8:25 PM	PAVA
Toluene	ND	2.00	4.00	NA	μg/Kg	11/27/2018 8:25 PM	PAVA
1,2,3-Trichlorobenzene	ND	2.00	4.00	NA	μg/Kg	11/27/2018 8:25 PM	PA/VA
1,2,4-Trichlorobenzene	ND	2.00	4.00	NA	μg/Kg	11/27/2018 8:25 PM	PAVA
1,1,1-Trichloroethane	NĐ	2.00	4.00	NA	μg/Kg	11/27/2018 8:25 PM	PAVA
1,1,2-Trichloroethane	ND	2.00	4.00	NA	μg/Kg	11/27/2018 8:25 PM	PA/VA
Trichloroethene	ND	2.00	4.00	NA	μg/Kg	11/27/2018 8:25 PM	PAVA
Trichtorofluoromethane	ND	2.00	4.00	NA	μg/Kg	11/27/2018 8:25 PM	PAVA
1,2,3-Trichtoropropane	ND	2.00	4.00	NA	μg/Kg	11/27/2018 8:25 PM	PAVA
1,2,4-Trimethylbenzene	ND	2.00	4.00	NA	μg/Kg	11/27/2018 8:25 PM	PAVA
1,3,5-Trimethylbenzene	ND	2.00	4.00	NA	µg/Kg	11/27/2018 8:25 PM	PAVA
Vinyl acetate	ND	20.0	40.0	NA	μg/Kg	11/27/2018 8:25 PM	PAVA
Vinyl chloride	ND	2.00	4.00	NA	μg/Kg	11/27/2018 8:25 PM	PAVA
o-Xylene	ND	2.00	4.00	NA	µg/Kg	11/27/2018 8:25 PM	
m,p-Xylene	ND	4.00	8.00	NA	μg/Kg	11/27/2018 8:25 PM	
Surr: 1,2-Dichloroethane-d4	98.6	NA	65-124	NA	%Rec	11/27/2018 8:25 PM	
Surr: 4-Bromofluorobenzene	103	NA	75.8-128	NA	%Rec	11/27/2018 8:25 PM	
Surr: Dibromofluoromethane	102	NA	74.1-126	NA	%Rec	11/27/2018 8:25 PM	
Surr: Toluene-d8	92.4	NA	77.3-130	NA	%Rec	11/27/2018 8:25 PM	
			100		701766		

WO#: 18112453

Date Reported: 12/4/2018

Original

Client:

PACE ANALYTICAL SERVICES LLC-WV

Collection Date:

11/15/2018 5:00:00 PM

Project: Lab ID:

0101-18-0317-001

Date Received:

11/19/2018

18112453-09A

Matrix:

Solid

Client Sample ID:

1805924-09 (P45 B5 (0-2.5))

Site ID:

WV

Analysis	Result	MDL	PQL	MCL	Qual	Units	Date Analyzed NE	LAP
PERCENT MOISTURE			Method:	SM2540	B-199	7	Analyst: DF	
Percent Moisture	19	NA	1.0	NA		wt%	11/20/2018 1:57 PM	
PCBS			Method:	SW8082	! A		Analyst: NC	
Aroclor 1016	ND	0.00832	0.0166	NA		mg/Kg	11/26/2018 6:50 PM	VA
Aroclor 1221	ND	0.00832	0.0166	NA		mg/Kg	11/26/2018 6:50 PM	VA
Aroclor 1232	ND	0.00832	0.0166	NA		mg/Kg	11/26/2018 6:50 PM	VA
Aroclor 1242	0.817	0.00832	0.0166	NA		mg/Kg	12/3/2018 10:00 AM	VA
Aroclor 1248	ND	0.00832	0.0166	NA		mg/Kg	11/26/2018 6:50 PM	VA
Aroclor 1254	ND	0.00832	0.0166	NA		mg/Kg	11/26/2018 6:50 PM	VA
Aroclor 1260	ND	0.00832	0.0166	NA		mg/Kg	11/26/2018 6:50 PM	VA
Surr: Tetrachloro-m-xylene	139	NA	25.6-130	NA	S	%Rec	11/26/2018 6:50 PM	

Notes:

The ending CCV for Aroclors 1016 & 1260 exceeds laboratory control limits, indicating a high bias. Since the analytes were not detected in the sample, the reported results are not affected by this bias.

POLYNUCLEAR AROMATIC HYDROCA (SIM)	ARBOI	NS	Method:	SW8270D	SIM		Analyst: CLS	
Anthracene 0.	0130 0.	.000698	0.00329	NA		mg/Kg	11/28/2018 12:57 AM	PA/VA
Acenaphthene 0.0	0532 0.	.000698	0.00329	NA		mg/Kg	11/28/2018 12:57 AM	PAVA
Acenaphthylene	ND 0.	.000698	0.00329	NA		mg/Kg	11/28/2018 12:57 AM	PAVA
Benzo(a)anthracene 0.	0502 0.	.000698	0.00329	NA		mg/Kg	11/28/2018 12:57 AM	PAVA
Benzo(a)pyrene 0.	0183 0.	.000698	0.00329	NA		mg/Kg	11/28/2018 12:57 AM	PAVA
Benzo(b)fluoranthene 0.	0256 0.	.000698	0.00329	NA		mg/Kg	11/28/2018 12:57 AM	PAVA
Benzo(g,h,i)perylene 0.0	0931 0.	.000698	0.00329	NA		mg/Kg	11/28/2018 12:57 AM	PA/VA
Benzo(k)fluoranthene 0.0	0931 0.	.000698	0.00329	NA		mg/Kg	11/28/2018 12:57 AM	PAVA
Chrysene 0.	0329 0.	.000698	0.00329	NA		mg/Kg	11/28/2018 12:57 AM	PA/VA
Dibenzo(a,h)anthracene 0.0	0266 D.	.000698	0.00329	NA	J	mg/Kg	11/28/2018 12:57 AM	PAVA
Fluoranthene),150 0.	.000698	0.00329	NA		mg/Kg	11/28/2018 12:57 AM	PAVA
Fluorene 0.0	0299 0.	.000698	0.00329	NA	J	mg/Kg	11/28/2018 12:57 AM	PAVA
Indeno(1,2,3-cd)pyrene 0,	0150 0.	.000698	0.00329	NA		mg/Kg	11/28/2018 12:57 AM	PAVA
Naphthalene 0.0	0233 0.	.000698	0.00329	NA	J	mg/Kg	11/28/2018 12:57 AM	PA/VA
Phenanthrene),120 0.	.000698	0.00329	NA		mg/Kg	11/28/2018 12:57 AM	PA/VA
Pyrene 0.4	0991 0.	.000698	0.00329	NA		mg/Kg	11/28/2018 12:57 AM	PAVA
Surr: Nilrobenzene-d5	118	NA	23.3-150	NA		%Rec	11/28/2018 12:57 AM	
Surr: 2-Fluorobiphenyl	69.7	NA	40.1-121	NA		%Rec	11/28/2018 12:57 AM	
Surr: 4-Terphenyl-d14	72.7	NA	24.9-124	NA		%Rec	11/28/2018 12:57 AM	

WO#: 18112453

Date Reported: 12/4/2018

Original

Client:

PACE ANALYTICAL SERVICES LLC-WV

Collection Date:

11/15/2018 5:00:00 PM

Project:

0101-18-0317-001

Date Received:

11/19/2018

Lab ID:

18112453-09A

Matrix:

Solid

Client Sample ID:

1805924-09 (P45 B5 (0-2.5))

Site ID:

wv

Analysis	Result	MDL	PQL	MCL	Qual	Units	Date Analyzed N	NELAP
VOLATILE ORGANIC COMPOUN	DS-8260	-	Method:	SW8260	В		Analyst: TKC	
Acetone	ND	15.6	31.2	NA		μg/Kg	11/27/2018 8:59 PM	PA/VA
Acrolein	ND	15.6	31.2	NA		µg/Кg	11/27/2018 8:59 PM	PAVA
Acrylonitrile	ND	15.6	31.2	NA		µg/Kg	11/27/2018 8:59 PM	PAVA
Benzene	1.89	1.56	3.12	NA	J	μg/Kg	11/27/2018 8:59 PM	PA/VA
Bromobenzene	ND	1.56	3.12	NA		μg/Kg	11/27/2018 8:59 PM	PAVA
Bromochloromethane	ND	1.56	3.12	NA		µg/Кg	11/27/2018 8:59 PM	PAVA
Bromodichloromethane	ND	1.56	3.12	NA		µg/Kg	11/27/2018 8:59 PM	PAVA
Bromoform	ND	1.56	3.12	NA		μg/Kg	11/27/2018 8:59 PM	PA/VA
Bromomethane	ND	1.56	3.12	NA		μg/Kg	11/27/2018 8:59 PM	PAVA
2-Butanone	ND	15.6	31.2	NA		µg/Kg	11/27/2018 8:59 PM	PA/VA
n-Butylbenzene	ND	1.56	3.12	NA		μg/Kg	11/27/2018 8:59 PM	PA/VA
sec-Butylbenzene	ND	1.56	3.12	NA		µg/Kg	11/27/2018 8:59 PM	PA/VA
tert-Butylbenzene	ND	1.56	3.12	NA		μg/Kg	11/27/2018 8:59 PM	PAVA
Carbon disulfide	ND	7.80	15.6	NA		µg/Kg	11/27/2018 8:59 PM	PAVA
Carbon tetrachloride	ND	1.56	3.12	NA		µg/Кg	11/27/2018 8:59 PM	PAVA
Chlorobenzene	ND	1.56	3.12	NA		µg/Kg	11/27/2018 8:59 PM	PAVA
Chloroethane	ND	1.56	3.12	NA		µg/Kg	11/27/2018 8:59 PM	PAVA
Chloroform	ND	1.56	3.12	NA		µg/Кg	11/27/2018 8:59 PM	PAVA
Chloromethane	ND	1.56	3.12	NA		μg/Kg	11/27/2018 8:59 PM	PAVA
2-Chlorototuene	ND	1.56	3.12	NA		µg/Kg	11/27/2018 8:59 PM	PAVA
4-Chlorotoluene	ND	1.56	3.12	NA		μg/Kg	11/27/2018 8:59 PM	PAVA
Dibromochloromethane	ND	1.56	3.12	NA		µg/Кg	11/27/2018 8:59 PM	PAVA
DBCP	ND	1.56	3.12	NA		µg/Кg	11/27/2018 8:59 PM	PA/VA
1,2-Dibromoethane	ND	1.56	3.12	NA		µg/Кg	11/27/2018 8:59 PM	PAVA
Dibromomethane	ND	1.56	3.12	NA		µg/Кg	11/27/2018 8:59 PM	PAVA
1,2-Dichlorobenzene	ND	1.56	3.12	NA		µg/Кg	11/27/2018 8:59 PM	PAVA
1,3-Dichtorobenzene	ND	1.56	3.12	NA		μg/Kg	11/27/2018 8:59 PM	PAVA
1,4-Dichlorobenzene	ND	1.56	3.12	NA		μg/Kg	11/27/2018 8:59 PM	PA/VA
Dichlorodifluoromethane	ND	1.56	3.12	NA		μg/Kg	11/27/2018 8:59 PM	PAVA
1,1-Dichtoroethane	ND	1.56	3.12	NA		μg/Kg	11/27/2018 8:59 PM	PAVA
1,2-Dichtoroethane	ND	1.56	3.12	NA		µg/Кg	11/27/2018 8:59 PM	PA/VA
1,1-Dichtoroethene	ND	1.56	3.12	NA		μg/Kg	11/27/2018 8:59 PM	PAVA
cis-1,2-Dichtoroethene	ND	1.56	3.12	NA		μg/Kg	11/27/2018 8:59 PM	PAVA
trans-1,2-Dichloroethene	ND	1.56	3.12	NA		µg/Kg	11/27/2018 8:59 PM	PAVA
1,2-Dichloropropane	ND	1.56	3.12	NA		pg/Kg	11/27/2018 8:59 PM	PAVA
1,3-Dichloropropane	ND	1.56	3.12	NA		μg/Kg	11/27/2018 8:59 PM	PAVA
2,2-Dichloropropane	ND	1.56	3.12	NA		ру/ку ру/ку	11/27/2018 8:59 PM	PA/VA

WO#: 18112453

Date Reported: 12/4/2018

Original

Client: Project: PACE ANALYTICAL SERVICES LLC-WV

0101-18-0317-001

Lab ID:

Client Sample ID:

18112453-09A

1805924-09 (P45 B5 (0-2.5))

Collection Date:

11/15/2018 5:00:00 PM

Date Received:

11/19/2018

Matrix: Site ID:

Solid WV

1,1-Dichloropropene cis-1,3-Dichloropropene trans-1,3-Dichloropropene	ND ND ND ND	1.56 1.56 1.56	3.12 3.12	NA		μg/Kg	11/27/2018 8:59 PM	PAVA
• •	ND ND		3.12	818				
trans-1,3-Dichloropropene	ND	1.56		NA		µg/Кg	11/27/2018 8:59 PM	PAVA
			3.12	NA		µg/Кg	11/27/2018 8:59 PM	PA/VA
Ethylbenzene	ND	1.56	3.12	NA		µд/Кд	11/27/2018 8:59 PM	PAVA
Hexachlorobutadiene	MD	1.56	3.12	NA		μg/Kg	11/27/2018 8:59 PM	PA/VA
2-Hexanone	ND	15.6	31,2	NA		µg/Кg	11/27/2018 8:59 PM	PAVA
lodomethane	ND	15.6	31.2	NA		µg/Kg	11/27/2018 8:59 PM	PAVA
Isopropylbenzene	ND	1.56	3.12	NA		μg/Kg	11/27/2018 8:59 PM	PAVA
p-Isopropyltoluene	ND	1.56	3.12	NA		µg/Кg	11/27/2018 8:59 PM	PAVA
Methylene chloride	ND	1.56	3.12	NA		μg/Kg	11/27/2018 8:59 PM	PAVA
4-Methyl-2-pentanone	ND	15.6	31.2	NA		µg/Кg	11/27/2018 8:59 PM	PAVA
MTBE	ND	7.80	15.6	NA		µg/Кg	11/27/2018 8:59 PM	PA/VA
n-Propylbenzene	ND	1.56	3.12	NA		μg/Kg	11/27/2018 8:59 PM	PA/VA
Styrene	ND	1.56	3.12	NA		µg/Кg	11/27/2018 8:59 PM	PA/VA
1,1,1,2-Tetrachloroethane	ND	1.56	3.12	NA		μg/Kg	11/27/2018 8:59 PM	PAVA
1,1,2,2-Tetrachloroethane	ND	1.56	3.12	NA		μg/Kg	11/27/2018 8:59 PM	PAVA
Tetrachloroethene	ND	1.56	3.12	NA		μg/Kg	11/27/2018 8:59 PM	PAVA
Toluene	1.76	1.56	3.12	NA	J	μg/Kg	11/27/2018 8:59 PM	PAVA
1,2,3-Trichlorobenzene	ND	1.56	3.12	NA		μg/Kg	11/27/2018 8:59 PM	PAVA
1,2,4-Trichlorobenzene	ND	1.56	3.12	NA		μg/Kg	11/27/2018 8:59 PM	PAVA
1,1,1-Trichloroethane	ND	1.56	3,12	NA		μg/Kg	11/27/2018 8:59 PM	PAVA
1,1,2-Trichloroethane	ND	1.56	3.12	NA		μg/Kg	11/27/2018 8:59 PM	PAVA
Trichloroethene	ND	1.56	3.12	NA		μg/Kg	11/27/2018 8:59 PM	PAVA
Trichloroftuoromethane	ND	1.56	3,12	NA		μg/Kg	11/27/2018 8:59 PM	PAVA
1,2,3-Trichloropropane	ND	1.56	3.12	NA		µg/Kg	11/27/2018 8:59 PM	PAVA
1,2,4-Trimethylbenzene	ND	1.56	3,12	NA		µg/Kg	11/27/2018 8:59 PM	PAVA
1,3,5-Trimethylbenzene	ND	1.56	3.12	NA		µg/Kg	11/27/2018 8:59 PM	PAVA
Vinyl acetate	NĐ	15.6	31.2	NA		μg/Kg	11/27/2018 8:59 PM	PAVA
Vinyl chloride	ND	1.56	3.12	NA		μg/Kg	11/27/2018 8:59 PM	PAVA
o-Xylene	ND	1.56	3.12	NA		µg/Kg	11/27/2018 8:59 PM	
m,p-Xylene	ND	3.12	6.24	NA		μg/Kg	11/27/2018 8:59 PM	
Surr: 1,2-Dichloroethane-d4	105	NA	65-124	NA		%Rec	11/27/2018 8:59 PM	
Surr: 4-Bromofluorobenzene	108	NA	75.8-128	NA		%Rec	11/27/2018 8:59 PM	
Surr: Dibromofluoromethane	103	NA	74.1-126	NA		%Rec	11/27/2018 8:59 PM	
Surr: Toluene-d8	90.1	NA	77.3-130	NA		%Rec	11/27/2018 8:59 PM	

WO#: 18112453

Date Reported: 12/4/2018

Original

Client:

PACE ANALYTICAL SERVICES LLC-WV

Collection Date: Date Received: 11/16/2018 12:00:00 AM

Project: Lab ID: 0101-18-0317-001 18112453-10A

Matrix:

11/19/2018 Trip Blank

Client Sample ID:

1805924-10 (TRIP BLANK)

Site ID:

VOLATILE ORGANIC COMPOUND Acetone Acrolein Acrylonitrite Benzene Bromobenzene	ND ND ND	5.00 5.00 5.00	Method: 10.0 10.0	SW8260	В		Analyst: DTC	
Acrolein Acrylonitrile Benzene Bromobenzene	ND ND ND	5.00		NA				
Acrylonitrite Benzene Bramobenzene	ND ND		10.0	4 44 4		μg/L	11/30/2018 1:40 AM	PAVA
Benzene Bromobenzene	ND	5.00		NA		μg/L	11/30/2018 1:40 AM	PAVA
Bromobenzene			10.0	NA		μg/L	11/30/2018 1:40 AM	PAVA
	445	0.500	1.00	NA		μg/L	11/30/2018 1:40 AM	PAVA
Tanana aktoro	ND	0.500	1.00	NA		μg/L	11/30/2018 1:40 AM	PAVA
Bromochloromethane	ND	0.500	1.00	NA		μg/L	11/30/2018 1:40 AM	PAVA
Bromodichloromethane	ND	0.500	1.00	NA		μg/L	11/30/2018 1:40 AM	PAVA
Bromoform	ND	0.500	1.00	NA		μg/L	11/30/2018 1:40 AM	PA/VA
Bromomethane	ND	0.500	1.00	NA		μg/L	11/30/2018 1:40 AM	PAVA
MEK	ND	5.00	10.0	NA		μg/L	11/30/2018 1:40 AM	PAVA
n-Butylbenzene	ND	0.500	1.00	NA		μg/L	11/30/2018 1:40 AM	PAVA
sec-Butylbenzene	ND	0.500	1.00	NA		μg/L	11/30/2018 1:40 AM	PAVA
tert-Butylbenzene	ND	0.500	1.00	NA		µg/L	11/30/2018 1:40 AM	PAVA
Carbon disulfide	ND	2.50	5.00	NA		μg/L	11/30/2018 1:40 AM	PAVA
Carbon tetrachloride	ND	0.500	1.00	NA		μg/L	11/30/2018 1:40 AM	PAVA
Chlorobenzene	ND	0.500	1.00	NA		μg/L	11/30/2018 1:40 AM	PAVA
Chloroethane	ND	0.500	1.00	NA		μg/L	11/30/2018 1:40 AM	PAVA
Chloroform	ND	0.500	1.00	NA		μg/L	11/30/2018 1:40 AM	PAVA
Chloromethane	ND	0.500	1.00	NA		μg/L	11/30/2018 1:40 AM	PAVA
2-Chlorotoluene	ND	0.500	1.00	NA		μg/L	11/30/2018 1:40 AM	PAVA
4-Chlorotoluene	ND	0.500	1.00	NA		μg/L	11/30/2018 1:40 AM	PAVA
Dibromochloromethane	ND	0.500	1.00	NA		μg/L	11/30/2018 1:40 AM	PAVA
DBCP	NĐ	0.500	1.00	NA		μg/L	11/30/2018 1:40 AM	PAVA
1,2-Dibromoethane	ND	0.500	1.00	NA		μg/L	11/30/2018 1:40 AM	PA/VA
Dibromomethane	ND	0.500	1.00	NA		µg/L	11/30/2018 1:40 AM	PA/VA
1,2-Dichlorobenzene	ND	0.500	1.00	NA		μg/L	11/30/2018 1:40 AM	PAVA
1,3-Dichlorobenzene	ND	0.500	1.00	NA		μg/L	11/30/2018 1:40 AM	PAVA
1,4-Dichlorobenzene	ND	0.500	1.00	NA		µg/L	11/30/2018 1:40 AM	PA/VA
Dichlorodifluoromethane	ND	0.500	1.00	NA		µg/L	11/30/2018 1:40 AM	PAVA
1,1-Dichloroethane	ND	0.500	1.00	NA		µg/L	11/30/2018 1:40 AM	PA/VA
1,2-Dichloroethane	ND	0.500	1.00	NA II		pg/L	11/30/2018 1:40 AM	PAVA
1,1-Dichloroethene	ND	0.500	1.00	NA		pg/L	11/30/2018 1:40 AM	PAVA
cis-1,2-Dichloroethene	ND	0.500	1.00	NA		μg/L	11/30/2018 1:40 AM	PA/VA
rans-1,2-Dichloroethene	ND	0.500	1.00	NA		pg/L	11/30/2018 1:40 AM	PAVA
1,2-Dichloropropane	ND	0.500	1.00	NA		pg/L pg/L	11/30/2018 1:40 AM	PA/VA
1,3-Dichloropropane	ND	0.500	1.00	NA			11/30/2018 1:40 AM	PA/VA
2,2-Dichloropropane	ND	0.500	1.00	NA		µg/L µg/L	11/30/2018 1:40 AM	PAVA

WO#: 18112453

Date Reported: 12/4/2018

Original

Client: Project: PACE ANALYTICAL SERVICES LLC-WV

0101-18-0317-001

Lab ID:

Client Sample ID:

18112453-10A

1805924-10 (TRIP BLANK)

Collection Date:

11/16/2018 12:00:00 AM

Date Received: Matrix:

11/19/2018 Trip Blank

Site ID:

Analysis	Result	MDL	PQL	MCL	Qual	Units	Date Analyzed N	ELAP
1,1-Dichloropropene	ND	0.500	1.00	NA		μg/L	11/30/2018 1:40 AM	PAVA
cis-1,3-Dichloropropene	ND	0.500	1.00	NA		μg/L	11/30/2018 1:40 AM	PAVA
trans-1,3-Dichloropropene	ND	0.500	1.00	NA		μg/L	11/30/2018 1:40 AM	PAVA
Ethylbenzene	ND	0.500	1.00	NA		μg/L	11/30/2018 1:40 AM	PAVA
Hexachlorobutadiene	ND	0.500	1.00	NA		μg/L	11/30/2018 1:40 AM	PAVA
2-Hexanone	ND	5.00	10.0	NA		µg/L	11/30/2018 1:40 AM	PAVA
lodomethane	ND	5.00	10.0	NA		μg/L	11/30/2018 1:40 AM	PAVA
Isopropylbenzene	ND	0.500	1.00	NA		µg/L	11/30/2018 1:40 AM	PAVA
p-Isopropylioluene	ND	0.500	1.00	NA		μg/L	11/30/2018 1:40 AM	PAVA
Methylene chloride	ND	0.500	1.00	NA		pg/L	11/30/2018 1:40 AM	PAVA
4-Methyl-2-pentanone	ND	5.00	10.0	NA		µg/L	11/30/2018 1:40 AM	PAVA
MTBE	ND	2.50	5.00	NA		µg/L	11/30/2018 1:40 AM	PAVA
n-Propylbenzene	ND	0.500	1.00	NA		μg/L	11/30/2018 1:40 AM	PAVA
Styrene	ND	0.500	1.00	NA		μg/L	11/30/2018 1:40 AM	PAVA
1,1,1,2-Tetrachloroethane	ND	0.500	1.00	NA		μg/L	11/30/2018 1:40 AM	PAVA
1,1,2,2-Tetrachloroethane	ND	0.500	1.00	NA		µg/L	11/30/2018 1:40 AM	PAVA
Tetrachloroethene	ND	0.500	1.00	NA		μg/L	11/30/2018 1:40 AM	PAVA
Toluene	ND	0.500	1.00	NA		μg/L	11/30/2018 1:40 AM	PAVA
1,2,3-Trichlarobenzene	ND	0.500	1.00	NA		μg/L	11/30/2018 1:40 AM	PA/VA
1,2,4-Trichlorobenzene	ND	0.500	1.00	NA		μg/L	11/30/2018 1:40 AM	PAVA
1,1,1-Trichloroethane	ND	0.500	1.00	NA		μg/L	11/30/2018 1:40 AM	PAVA
1,1,2-Trichloroethane	ND	0.500	1.00	NA		μg/L	11/30/2018 1:40 AM	PAVA
Trichloroethene	ND	0.500	1.00	NA		μg/L	11/30/2018 1:40 AM	PA/VA
Trichlorofluoromethane	ND	0.500	1.00	NA		μg/L	11/30/2018 1:40 AM	PAVA
1,2,3-Trichloropropane	ND	0.500	1.00	NA		μg/L	11/30/2018 1:40 AM	PAVA
1,2,4-Trimethylbenzene	ND	0.500	1.00	NA		μg/L	11/30/2018 1:40 AM	PAVA
1,3,5-Trimethyibenzene	ND	0.500	1.00	NA		μg/L	11/30/2018 1:40 AM	PAVA
/inyl acetate	ND	5.00	10.0	NA		μg/L	11/30/2018 1:40 AM	PAVA
/inyl chloride	ND	0.500	1.00	NA		μg/L	11/30/2018 1:40 AM	PAVA
p-Xylene	ND	0.500	1.00	NA		µg/L	11/30/2018 1:40 AM	PAVA
n,p-Xylene	ND	1.00	2.00	NA		µg/L	11/30/2018 1:40 AM	PA/VA
Surr: 1,2-Dichloroethane-d4	103	NA	75.9-132	NA		%Rec	11/30/2018 1:40 AM	
Surr: 4-Bromofluorobenzene	94.8	NA	73.6-132	NA		%Rec	11/30/2018 1:40 AM	
Surr: Dibromofluoromethane	98.2	NA	80.1-127	NA		%Rec	11/30/2018 1:40 AM	
Surr: Toluene-d8	103	NA	72.4-119	NA		%Rec	11/30/2018 1:40 AM	



Pace Analytical Services, LLC. PO Box 684056 Chicago, IL 60695-4056 TEL: (304)255-2500

Website: www.reiclabs.com

Sample Receipt Checklist

Client Name: PAC009	Work Order Number: 18112453									
RCPNo: 1 Date and Time Received:	11/19/2018 6:11:	49 PM Received by:	Blane Williams							
Completed By: Zach Cook	Reviewed By:	Billy Shirley								
Completed Date: 11/19/2018 6:32:16 PM	Reviewed Date:	11/20/2018 6:34 AM								
Carrier Name: Pace										
1. Chain of custody present?		Yes x No								
Chain of custody signed when relinquished and received?		Yes x No .								
Are matrices correctly identified on Chain of custody?		Yes x No								
4. Is it clear what analyses were requested?		Yes x No 🗆								
5. Custody seals intact?		Yes No 🗆	Not Present x							
6. Samples in proper container type and preservative?		Yes X No 🗌								
Were correct preservatives noted on COC?		Yes x No .	NA 🔲							
8. Sample containers intact?		Yes x No								
Sufficient sample volume for indicated test?		Yes x No								
10. Were container labels complete?		Yes x No								
11. All samples received within holding time?		Yes x No	_							
12. Was an attempt made to cool the samples?		Yes x No	NA 🔲							
13. Sample Temp. taken and recorded upon receipt?		Yes x No	To 5.6 °C							
14. Water - Were bubbles absent in VOC viats?		Yes No	No Vials X							
15. Are Samples considered acceptable?		Yes X No 🗀								
16. COC filled out property?		Yes No								
Client Notification/Response										
Client Name: PAC009		Work Order Number:	18112453							
Comment:										
Client Contacted: Yes No No NA X	Person Cor	ntacted:								
Contact Mode: Phone Fax: Email:	In Person:									
Date Contacted: Con Regarding: Client Instructions:	tacted By:									
Corrective Action:										

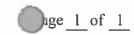
\sim					TODY #	Unalytic	al Re	quest Do	cume	nt		LABU	SE ONLY-1	ffir thank	101	1245	3	orkorder N	umber o	MTJL	Log-in
	0	ř	ace Beaver	, WV										Foreign							- 1
/ Face Analytica	1																				
0 0 4 1 1 2 4 4	<u>. </u>		Chain-cl	Custody is	A LEGAL O	OCUMEN	- Coreç	icht all releva	et falls			1	41.1			C009					
Company: Pace Analytical Sei Kurricane, WV	Vices	•	& Westberidg	e Orive									ALL	PACE				3 USE	ONL	f	
Address: 5 Westherlöge Drive	_		Horicane, W	T ZALZE					⊢			Contra	ner Freseria		Billy	Shirle	у				
Serticane, NV 25826									6,7		U	Ì		T	\Box	$\neg \top$		_			
Import Tot. & Weatheridge Crisis Auricana, WY 25626			Estail Tec be	an ichard	(Constitution	.COURS			President	rassiva i j sta, (ii) ta	pes: (1) +a spac, (4) p	re acut, [2] Roote acu	tolkent stad, ((ii) promptie	hjdeste nike, D	c acat, (4) a	ring hydro	150, Ed Depressing F	nthant (7) s	idan biri	180, [E] 31	Mars
ley To: Brian Richards			Site Collection	Life St.					L										_		
<u> </u>										1	_	T T	Analyses	_	1 1	_	LES Profesion				
astomer Project KamePlander: 8181-66-8117-8	B1		State Cas W/ /	mplicity	/ B	ma Zance Co T	rincin)										LAB Satepie Baczi			_	\neg
bone: 304-757-8554	Sile	acilly O	4		Complies	o Monker	ing?				İ						Costanty Seek Costanty Signs			4 I	MA
mail: elected by (pict):					[I] Yes [ĺ							Colorar Sign			4 1	ш
AGIAKO	L	heise Ordine	1		OW PH'S E								- 1				Bottley lesses Currous Boule		7	11 6 m 1	MA I
1/0/1/62	Chett				OWLecula	on Condust.									ĺĺ		Reflicted Vol.		y		EL
efected by (separators):	Tents	around D	ate Required.		<u> </u>											İ	Exemples recei		Ţ		M
	_	11/29/10	 		Įų γes (,									VOA - Flandsyn USDA Rogules		Mar T		MA .
regle Disposat; Dispose as appropriate [Robers	RUSI	Ht Next Day	r 20:		FielFiles Yes		abieţ.							İ	ĺΙ	- i	Stopping in that		¥	H I	u
Archive	4 Day	r 5 Day		,,,	Acalysis_	-				SEM.)			-				Profesional Color Clarine:	ju Presect	Ā	11 1	u
fatrix Codes present in Matria box below): Orieta		on Carp		M Waster	_			-21001100		Į.							Sample pri Acc	eptable	Ŧ	H H	u
LL Wipe (MP), Air (AR), Tiesse (TS), Bicessay (B), Yapor	M Other	(01)	of sections	ees (mm) 1	TORRIGHT (PT)	, aorta	auro far 7 (ne		8270 (pfi Dript: Selfet Presen				
Customer Sample ID	March		Coffected		Compassive End		8260								Land Acotom S				"		
		Gent	for Composite Star						Ü	SVOCE	800	ı		1							
	1		Date	Tier	Date	Time	1_		2	8	F O						LANCISE DILT: 4 LA Sample P/Consum				\neg
1505924-01 (81 81 (2 5-4 2))	5	G	11/15/2015	1700				1 FC, 1 Bcz	X	Х	X		i								
1805924-02 (89 B2 (0-2.5))	5	G	10/15/2018	1700				115,18e	X	X	X	1						-			
1805324-03 ((P43 A2 (0-3))	5	G	11/15/2019	1230				17C 18og	X	X	X					-	-				
1835624-34 (P43 B6 (0-2))	S	G	11/13/2015	1500				175,18e	X	X	X	-	40	1	T	1	j	-	-	-	
1905524-35 (F43 07 (5-7.5))	S	G	11/13/2018	1515				1TC. 1 8xz	X	x	x	-				-	-	-			
1805524-06 (P43 E3 (C-2.5))	S	G	11/14/2018	1700		10.000	-	11C, 1 licz	Y	X	X		-		- 1				-		
1505524-07 (F43 F2 (0-2 4))	5		11/14/2018					1TC, 1 lbz		X	X			-					min (100 mm		-
1805924-08 (P45 B1 (G-2.5))	-		11/15/2018		- 1 444)		-	-	-	_		-		-							ı I
1805924-09 (P45 B5 (D-2 5))		211				ļ.	17	11C, 18cz		X	X					-4-					-
	5		1415/2018	1700		-		1 TC, 1 licz		X	X	- 1	- Jan		Ц.	_ _		- det			2.
1805924-10 (Trop Blank) Inmer Research Special Conditional Possible (U	\$	G	pps of les Unit	-		1		2VOA	X	1	1		1 :	40.1			Apton	sc nill	6		╛
10	Karus.	<u> </u>	नेत् क्रमा	Dγ[] %	m()		SHORT	THOLDS PAS	SEATE	72 hour	st Y	II I	IA.			LABS	arajie Temperature byle:				
			ching Rateral (lock		tAB find	ing it.						907.1	L LAB USE	ONLY		Temp Blash receiver	G		IU,	
			olchass sample)			Samples re	-1-4-						_				Cooler 1 Trap Upon	marrie S	- (a	- 4	1
1. ~			101 carst Y			FEET	[[UP3	i	[]Casa	= []?	tez Courie	,	U Tab	1 ft		-	Cooler & Thesas Core.		0.0	ac.	
Carpful by Cylingrapy: (Tagashyla)		Date Tiese	: 1		lecations but	Mary I	4	1		Ē	Catal Texas		ACC	T (F			Cooler 1 Corrected T	-	6	ec	
Indu Lalut		11-19-	18/9	v k	MA	Pil	W	ント	19-1	8		10	Te=	plate			Comments:	~~ <u>~</u>			
glished by Company (Square)	ų.	CateTane		Ī	and by	estad :	Span	el .			Colon Turner.	· 1 ·	Prel	girt				N NA	_	_	
quicked by Company (Signature)	-	Date/Time	10 - 100 -		incrined by C	impery : I	Spalu	때	_		latel Tone:		- Pit				CL MeON TSP	Other	Beer		_
										ĺ			PS.	_		- 1	enformescejá ES Es		Page, of	_	
		_		- 1						:						. , 1	- W	1		_	. 1



CHARLESTON OFFICE 7012 MacCorkle Avenue, SE Charleston, WV 25304 Phone: (304) 342-1400 Fax: (304) 343-9031 M. GANTOWN OFFICE 125 Lakeview Drive Morgantown, WV 26508 Phone: (304) 225-2245

Fax: (304) 225-2246

WINCHESTER OFFICE 15 South Braddock Street Winchester, VA 22601 Phone: (540) 450-0180 Fax: (540) 450-0182



CHAIN OF CUSTODY RECORD

CLIENT/S.	AMPLING SITE:	HMDA Flint Parcels 43 and 45					LAB	USED:	Pace (Hurrid	cane)		HOW	/ SHIP	PED:	Hand Delivered
		Huntington, WV						Dave	Corsar	O	_		*			
			OFFI	CE LO	CATIO	N(S):	Charle	ston								
POTESTA	PROJECT NO.:	0101-18-0317-001	BILL TO:		IL(S):			djcorsaro@potesta.com								
DELIVERA	ABLE: Email (P	PDF and EDD) (e.g., E	mail, Hard Copy, EDD (Excel), Other)					PLER(S):	AG/RB						
SAMPLE L	OG AND	PRESERVATIVE CODES (See Note 1) 0 No Preservative 1 Hydrochloric Acid 2 Nitric Acid 3 Sulfuric Acid	TURNAROUND TIME Regular X						Level SIM)						3	NOTES: 1) Sample(s) cooled upon collection unless otherwise noted.
ANALYSIS REQUESTED 1805924 SAMPLE ID		4 Sodium Thiosulfate 5 Sodium Hydroxide 6 Zinc Acetate 7 EDTA 8 Other - See Comments	(Indicate	1/15	ANALYSIS REQUESTED and METHOD	VOCs (8260)	SVOCs (8270 - Low	Metals					Solids (See Note 2	2) % Solids analysis required to generate dry-weight basis analytical results for solid and semi-solid samples.		
		NO, & TYPE OF CONTAINERS (Note Preservative Code)	DATE	TIME	MATRIX	COMP/ GRAB		VOCs	SVOC	RCRA	PCBs				% Sol	REMARKS
B1 B1 (2.5-4.2)	-01	1 Terra Core Kit and 2-9 Ounce Jars (0)	11/15/18	1700	Soil	Grab	575	Х	Х	Х	х					
B9 B2 (0-2.5)	- <u>()</u> Z		11/15/18	1700	1		560	х	х	х	Х					
P43 A2 (0-3)	-(2)3		11/16/18	1230			TWEE THE	Х	х	Х	х					
P43 B6 (0-2)	-04		11/13/18	1600			E 34	Х	х	X	х					
P43 D7 (5-7.5)	-05		11/13/18	1515			6.23	х	х	X	х	$\neg \dashv$				
P43 E3 (0-2.5)	-06		11/14/18	1700			443	X	х	X	X					
P43 F2 (0-2.4)	-()7		11/14/18	1730			4	х	х	x	х	\dashv				
P45 B1 (0-2.5)	-08		11/15/18	1700			W. S.	Х	x	X	X	\dashv		\dashv		
P45 B5 (0-2.5)	-09		11/15/18	1700	₩		lega.	Х	x	X	X	\dashv	\dashv			
Trip Blank	-10	2-40 mL VOA Vials (1)	N/A	N/A	Water	N/A		Х				\dashv	\dashv	-		
RELINQUISHED BY: (SIG	LI	RECEIVED BY: (SIGNATURE)	1		DATE DATE	18 17	IME PSS	СОММ	ENTS:							
RELINQUISHED BY: (SIG		DATE	TI	ME	(LAB USE ONLY) Temp. (°C) Note Issues with Sample Condition in Remarks or Comments Section								Sample Condition in Remarks or Comments Section			
						Coo	Cooling Method (Circle One) Ice Refrigerated									